

Section

Seven



Author's Edition





GOODS FOR THE EXPOSITION

and the exhibit in this line includes a hollow shaft for the Old Colony Steamboat company about 40 feet in length, and finished cranks for the cruiser *Minneapolis* and the steamer *City of Sydney*, of the Pacific Mail line.

Another extensive exhibit of ordnance is that of the Hotchkiss company, in an outdoor space adjoining the annex on the south-east. Projectiles for rapid-firing guns are shown, with pierced steel plates from one to four inches in thick-

ness. There are naval landing guns with a range of nearly a mile, rapid-firing cannon carrying shells of from one to fourteen pounds, and various specimens of the revolving style and those which are best adapted for use in a rough or mountainous country, together with horse battery caissons carrying as much as 96 rounds.



MAN'S UNIVERSAL BURDEN BEARER



ON THE FRIEZE OF THE TRANSPORTATION BUILDING

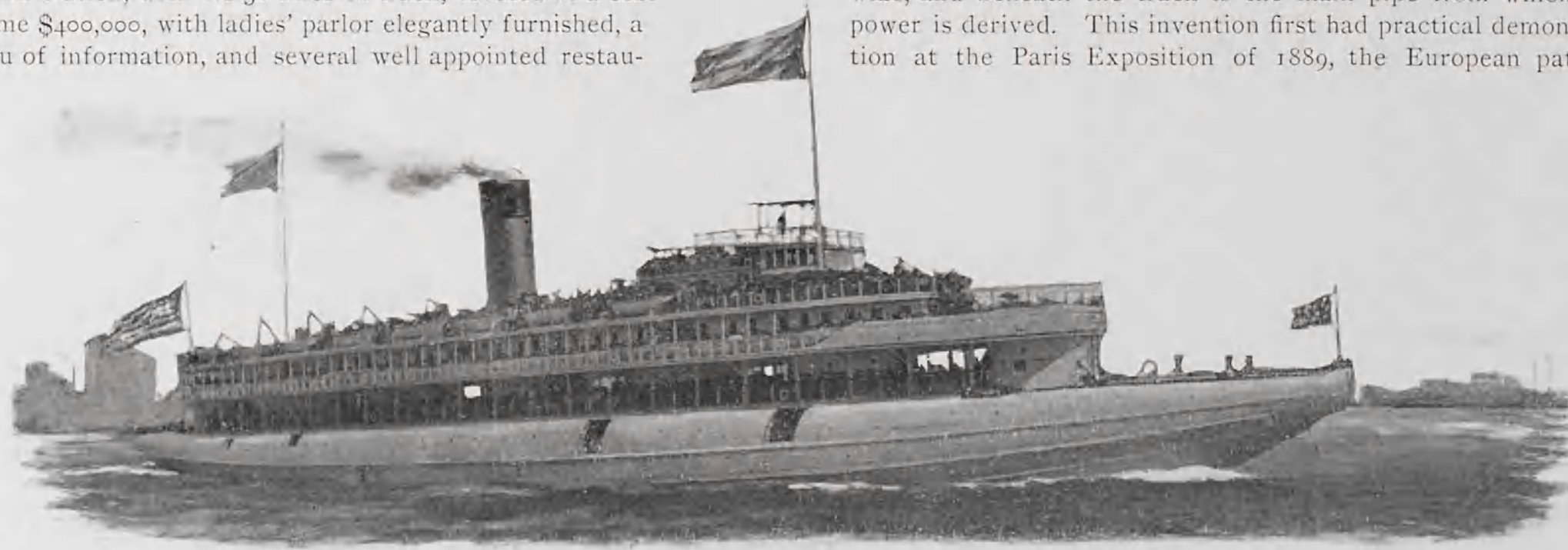
WORLD'S FAIR MISCELLANY.—In the Transportation department power was furnished by electricity or compressed air for the operation of machinery; but the use of steam was avoided as far as possible; nor were any lines of shafting erected within the building. As a precaution against accident, all exhibits of machinery in motion were enclosed by a railing.

Included in the railway division of this department is the terminal station, with its 30 lines of track, erected at a cost of some \$400,000, with ladies' parlor elegantly furnished, a bureau of information, and several well appointed restau-

rants. A special feature is a series of 24 clocks placed upon the walls of its rotunda, whereby the visitor may ascertain the hour of day at as many of the great cities of the world. The clocks are regulated by United States observatory time.

The intramural or elevated electric road, operated within the Exposition grounds, is also included in this department. In its power plant are the great dynamo and engine described in the chapter on electricity. Its system is about six miles in length and the circuit is made in less than half an hour, affording an excellent view of the external features of the Exposition. The intramural road, it may here be stated, cost \$1,000,000, and though carrying nearly 6,000,000 passengers during the term of the Fair, resulted in a heavy loss.

Along the south side of the Midway plaisance is another elevated road, which is also considered as a portion of the Transportation department. Its cigar-shaped cars travel at a high rate of speed, being provided with runners or shoes, and propelled by turbine motors. Not only is water the motive power, with a pressure of about 150 pounds to the square inch, but the cars slide upon a film of water which issues from a small pipe behind each shoe. The rail covered by the water film is about eight inches wide, and beneath the track is the main pipe from which the power is derived. This invention first had practical demonstration at the Paris Exposition of 1889, the European patents



WHALEBACK STEAMER "CHRISTOPHER COLUMBUS"



MAIN DESIGN OF THE MACMONNIES FOUNTAIN

being controlled by Prince André Poniatowski, who claims that his system will work a revolution in the domain of transportation.

A much frequented portion in the marine division of the United States was that of the American Steam Barge company, of West Superior, Wisconsin, builders of the new style of steamer known as

tapering from the middle toward the bow and stern; and the ends of the cylinder lifting high out of the water like a birch-bark canoe. The vessel was lighted throughout with electricity and elegantly furnished, the grand saloon containing several fountains and large aquaria filled with lake fish. Besides conveying passengers from the



"WHITE STAR" PAVILION NEAR WOMAN'S BUILDING

city to the Exposition, the *Christopher Columbus* made several excursions to Milwaukee and neighboring ports, upon which occasions it proved itself the fastest boat on the lakes.

By the World's Fair Steamship company 1,758,665 passengers were carried during the Exposition season, and almost as many by the steam and electric launches and gondolas plying on the waterways within the grounds, the entire travel by water exceeding 3,000,000. No accidents were reported.

Scattered throughout the Transportation building are various exhibits of pneumatic tubes, overhead tracks, etc., designed for the conveyance of money and packages in large business establishments, and in the annex is pneumatic machinery for carrying grain.

the Whaleback. When the first of the class appeared upon the lakes it was the subject of much ridicule, but soon it demonstrated its capacity for speed under all conditions of wind and weather. At the Fair the Whaleback representative was the *Christopher Columbus*, its steel cylinder-like body being more than 360 feet in length,



INTRAMURAL ELECTRIC CARS



SECTION OF STATE ROOM "WHITE STAR" LINE

Elevators, whether in actual service or on exhibition, are included in the transportation department, some of them being run by steam, some by water, and others by electricity. Among the miscellaneous exhibits installed in the annex may be mentioned the great steam shovels for dredging and the continuous chains of buckets for

hard wood, and contains reception rooms for the public and private offices for the company, and upon the outer walls are photographs of the works at Bay City, and of the cranes, pile drivers, wrecking cars, and railway appliances manufactured by the company. In the out-door space are several massive pieces of hoisting apparatus used in the installation of exhibits. In this vicinity is also an exhibit of what are known as Pintsch gas buoys.

In addition to Siemens and Halske's exhibit of safety apparatus for railways, several American manufacturers show ingenious appliances of this description. The Johnson Railroad Signal company, of New Jersey, has a large pavilion constructed of the various apparatus employed in the Syke block system for grade crossings. Another company illustrates in a model a similar system in which no movable apparatus is located on the road-bed or other exposed place.

Near the lagoon, north of the Horticultural building, is the pavilion of the White Star Steamship line, reproducing, as far as possible, the outlines of an Atlantic steamer. It has two decks, with the familiar rail and netting, the latter hung with life buoys bearing the names of the company's fleet. Side lights take the place of windows, and on the decks are comfortable seats and chairs. The exterior coloring is of buff or cream and the gilded dome is surmounted by a five-pointed star and lighted by electricity at night. The interior affords an idea of the comforts and luxuries of the White Star service. In the centre are models, under glass, of its vessels, and near the main entrance a large

chart showing the tracks of the company's fleet. Small models of the different boats are moved daily along their special routes, locating them approximately according to the reception of official reports.

On Transportation day, the 9th of September, a naval parade was held on the lagoon, in charge of A. C. Baker, superintendent of the



MOVABLE SIDEWALK AND PIER

carrying water and semi-liquids. The largest steam shovel in the building, exhibited by a Bucyrus, Ohio, company, is used as a pavilion, and is well adapted to the purpose.

In the southeastern corner of the annex, and extending outside of it, is the exhibit of the Bay City Industrial works, of Michigan. The pavilion, which is within the building, is finished in light

marine division of the department. Modern yawls, Turkish craft, boats in the government service, Norwegian fishing smacks, Indian canoes, and craft from Ceylon, Egypt, Venice, Brazil, and other nations passed in picturesque review. Then came aquatic sports, and in the afternoon the agents of transportation by land were marshalled by J. G. Pangborn, secretary of the American exhibitors' association.

There were brute and human carriers and vehicles of curious patterns, typical of many eras and nations. The engine *John Bull* was pressed into service, and many crowded into the old-fashioned coaches attached to it for a ride on the tracks of the terminal station, where these relics of early American railroads are on exhibition.

The operations of the Pullman Palace Car company were started, as I have said, in Chicago, and so rapid was the growth of its business that shops were soon afterward established in St. Louis, Detroit, Elmira, and Wilmington. But even these could not keep pace with the demand, which could only be supplied by the erection of works on a larger and more comprehensive scale than any before attempted. Chicago, as the railroad centre of the continent, appeared

used more than 50,000,000 feet of lumber and 85,000 tons of iron a year. At the construction shops there could be built, within a twelve-month, 12,520 freight cars, 313 sleeping cars, 626 passenger cars, and 939 street cars, which, if coupled together, would form a train 100 miles in length. The number of miles run by Pullman cars during the year ending July 31st, 1893, was 206,453,796, the longest unbroken run being from Boston to Los Angeles, California, a distance of 4,322 miles.

The 16th of September, the date on which the Manchester and Liverpool railway was opened sixty-three years before, was selected as railroad day by the Exposition authorities. Many prominent railroad men from the United States and foreign countries partici-



MODEL OF PULLMAN

to be the most suitable location; but to this there were weighty objections, which need not here be mentioned. Thus it was that George M. Pullman looked about him for a spot that would fulfil all the requirements of his constantly expanding business, and this he found near the shore of Lake Calumet, some fourteen miles from Chicago. Here he purchased a tract of 3,500 acres, now included within the city limits, whose suburbs are already encircling its borders. Such in brief is the origin of the town of Pullman, the most thriving of all our young western settlements, with its eight miles of paved streets, its handsome business blocks and residences, with modern appliances for comfort and sanitation, with churches, school-houses, and libraries, and a cosy theatre tastefully upholstered and equipped, all planned with symmetrical unity of design, amid stretches of lawn and park, and bordered with flowers of brilliant hue, the home of one of the most prosperous and contented communities in the world, and the more so that it has not a drinking saloon

pated in the exercises and recreations, which included a trip on the intramural road, the movable sidewalk, and the historic pioneer train drawn by the *John Bull*, with a tug of war between an electric and a steam engine, the steam locomotive, though only an old switch engine, easily dragging its competitor along the track. The exercises, which were held in Festival hall, were largely attended, and included the usual feasting and speech-making.

On her westward trip the *John Bull*, with her two primitive coaches, left New York at 10 A. M. on the 17th of April, arriving at Chicago, after a triumphal procession, on the afternoon of April 22d. The engine was run as swiftly as its condition would allow, with its wheezy boiler and rusty apparatus, followed by a special train of officials and journalists, and passing at times between throngs of enthusiastic spectators, waving hats and handkerchiefs as the time-worn relic went snorting past, with warning note of bell, resembling the sound of a dinner gong. The engine kept excellent time, though rumbling awkwardly over the rails and swaying to and fro like a vessel rolling in the trough of ocean. The tender is within two feet of the furnace door, and upon it is an odd-looking contrivance shaped like a poke bonnet, and called the gig top, where the forward brakeman sat, keeping a sharp lookout for other trains. The *John Bull* was driven by the same engineer who handled the locomotive forty-two years ago, and, as he said, "obeyed the lever as if her joints were not worn with age and stiff with rheumatism."

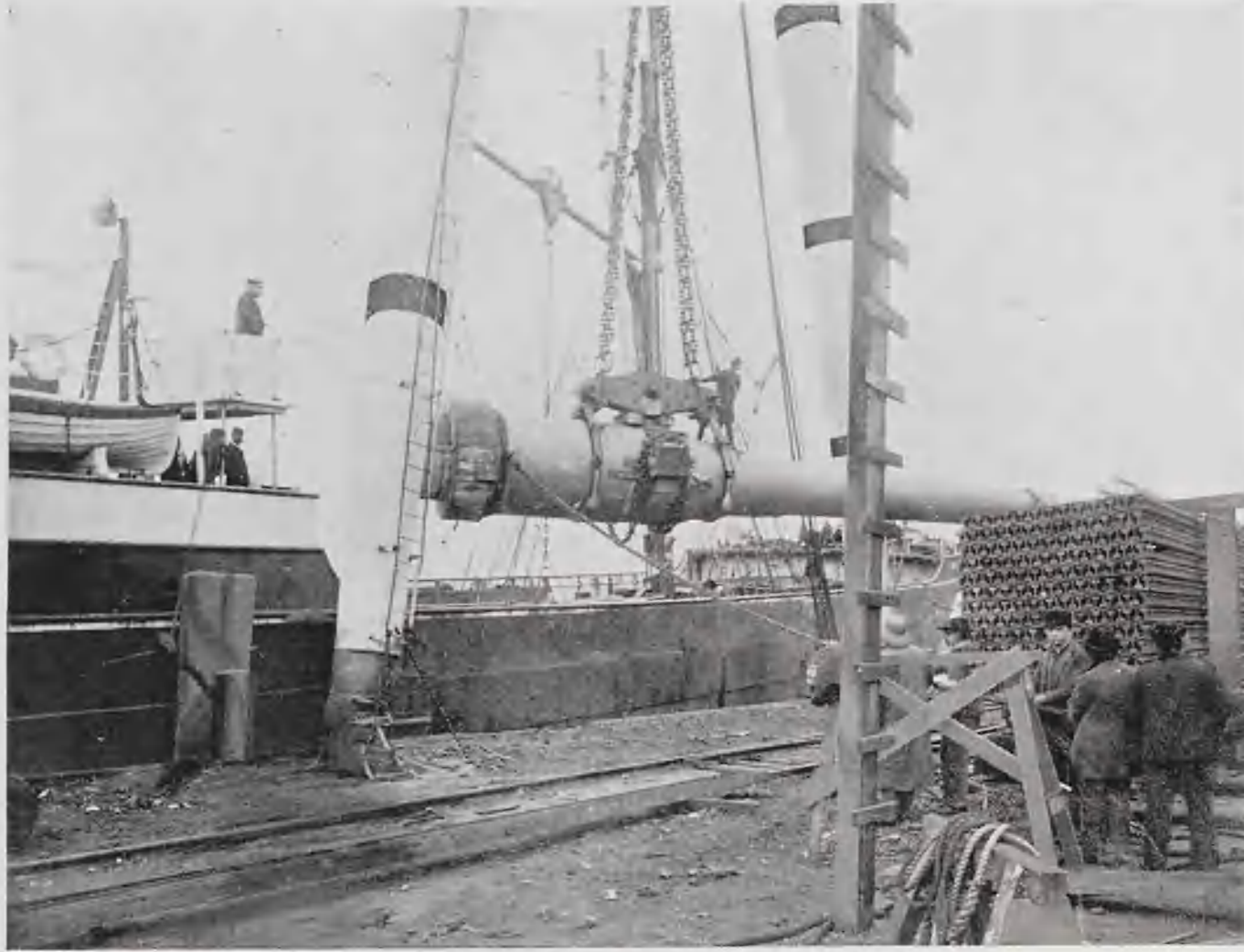
Of the Murdock engine, invented in 1784, as mentioned in the text, the following story is told in an English publication of many years ago. Murdock's experiments were conducted by night, near the Cornwall

town of Redruth. Returning late from a visit to his flock, the pastor of this parish was suddenly confronted by a fire-breathing monster advancing furiously upon him. He sprang aside, and before the demon could turn upon him had run such a distance that, as it seemed, his fervid prayers for deliverance had been



UPPER DECK STREET CAR

within its limits. By the Palace Car company there is distributed in all nearly \$150,000 a week as the wages of 15,000 employees; and of the 6,300 operatives engaged at its works at Pullman, a large proportion have homes of their own, while the Pullman Savings bank has \$630,000 to the credit of 2,000 operatives. At these works there are



HOISTING THE KRUPP GUN FROM THE SHIP

answered. Still he ran, however, and presently came full butt against a man running in the opposite direction.

"Back! back!" he cried. "Run back for your life!"

"Have you seen my engine?" asked the other.

"I've seen the devil! Run! run!"

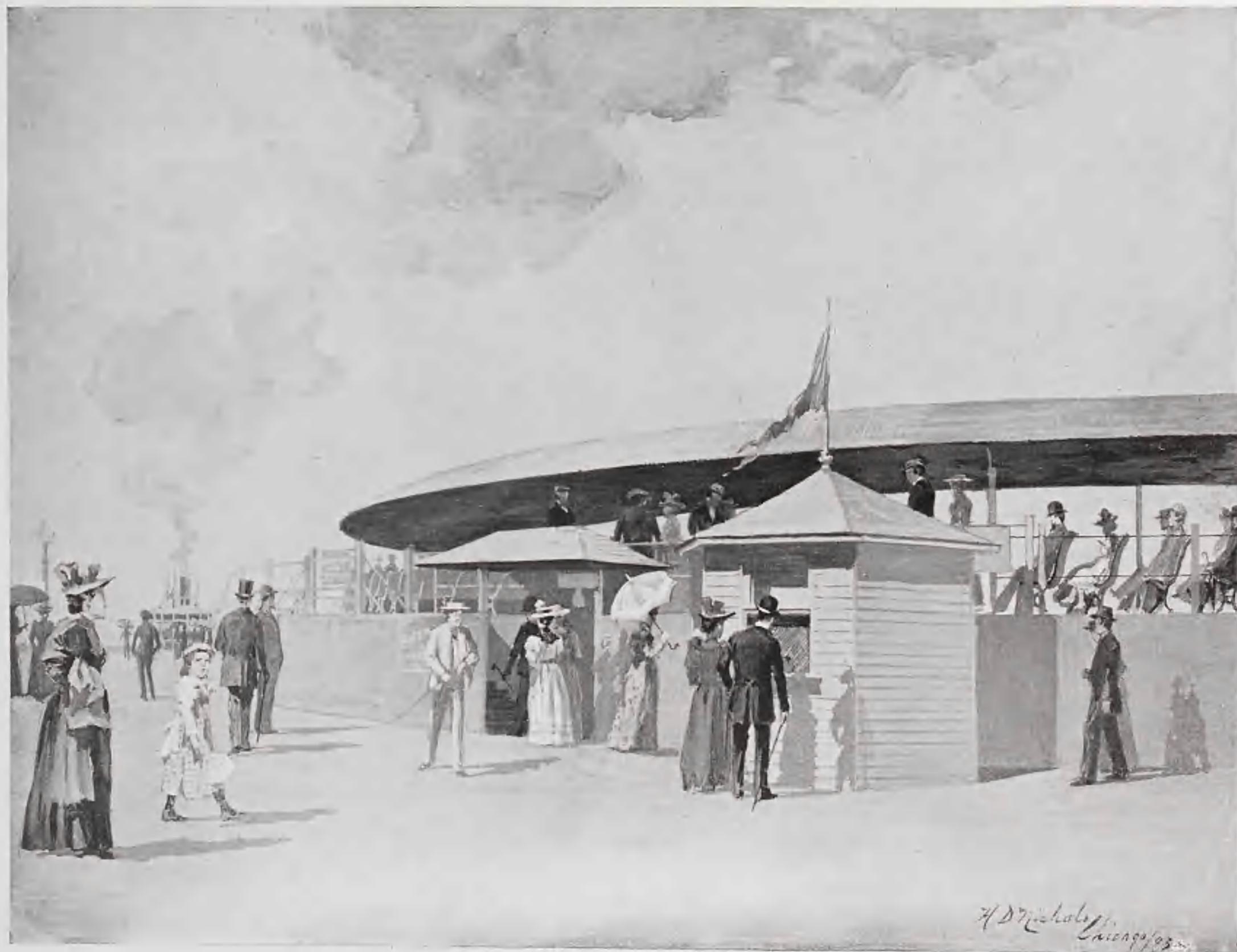
"How far away is he?"

The stranger's tone was somewhat reassuring; and bethinking him that he of all others should have courage to face the evil one, the worthy pastor turned back with his companion, who, it need not be said, was William Murdock. Soon they found the engine, which had run into a ditch, snorting and roaring in terrific fashion, and thence, to the astonishment of the parson, was dragged by its artificer.

Before being stationed among the exhibits of the New York Central railroad the engine 999 was attached to various trains to test her speed. On the 9th of May, while running on the Empire State express from New York to Buffalo, it is claimed that she made the last 69 miles in 68 minutes, making one of these miles in 35 seconds, and on another occasion, as mentioned in the text, a mile in 32 seconds. These figures are not official; but while there is no reliable evidence that this or any other locomotive ever before ran at the rate of over 100 miles an hour it is certain that the 999 exceeded that rate after the close of the Fair.

To test her speed and capabilities, the *Greater Britain*, sister engine to the *Queen Empress* in the London and North-Western company's section, was run for six days in succession between London

and Carlisle, attached to some of the heaviest mail and express trains, their average weight, including engine and tender, exceeding 237 tons. The total distance travelled was 3,588 miles, and the time 75 hours and 17 minutes, or an average of nearly 48 miles an hour. The fastest runs were between London and Crewe, 158 miles in 3



A NEAR VIEW OF THE MOVING SIDEWALK

hours and 8 minutes, or a little over 50 miles an hour. This is probably almost as good time as will be made by the Empire State express, when on regular service, notwithstanding the exaggerated accounts that have been published. Fifty miles an hour is in fact about the limit of speed, with due consideration to wear and tear of road-bed and rolling-stock.

Of the capture and recapture of the locomotive *General*, exhib-

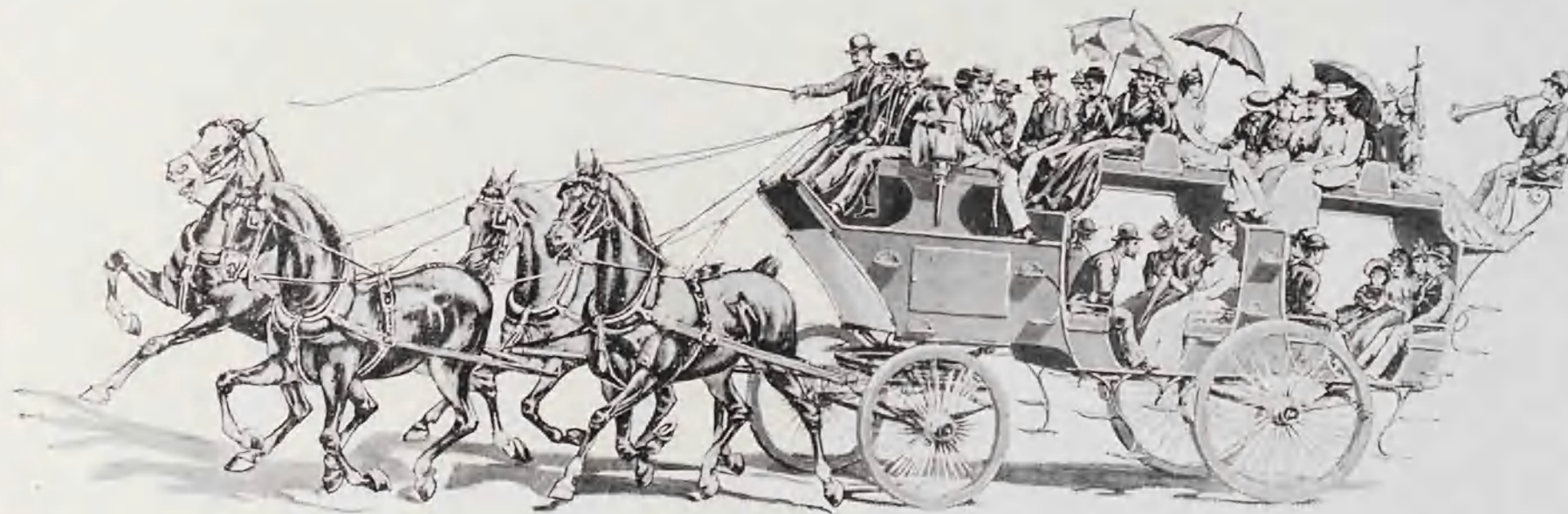
between Atlanta and Chattanooga. Disguised as Kentuckian farmers on their way to join the confederate cause, they reached Marietta early on the 12th of April, 1862, and there boarded the train for Chattanooga. At the next station the train stopped for breakfast, and there the attempt was made, though close at hand was a confederate camp, with sentries pacing to and fro. While the driver and conductor were taking their meal at the station, the raiders



ELECTRIC BOAT IN PROCESS OF CONSTRUCTION

ited by the Nashville, Chattanooga and St Louis railroad, the following is briefly the story: Soon after the battle of Shiloh General Mitchell was laying his plans for the capture of the confederate stronghold at Chattanooga, and for that purpose it was necessary to cut off railway communication with Atlanta. The task was undertaken by Captain Andrews and a chosen band of federal scouts, their object being to capture a train on the Western and Atlantic line, and burn the bridges

uncoupled all but the foremost car, and a moment later were speeding northward with their prize. Then followed "the great locomotive chase" which history records, Andrews and his men being hotly pursued and finally driven to the woods, where they were hunted with bloodhounds and captured, eight of them, including the captain, being executed as spies.





GENERAL VIEW ALONG THE WEST LAGOON



CHAPTER THE NINETEENTH

THE LIVE-STOCK DEPARTMENT



FOR the information of those who are interested in the Live-stock exhibits, a few remarks may be in place as to their origin and organization. Like all other features of the Fair, architectural, industrial, or artistic, there has here been a departure from the preconceived idea that anything intended to be a success must be absolutely controlled by a central head. The entire plan of the Columbian Exposition was itself a departure from this popular theory, and represents in all its branches the most advanced ideas of men possessed of the highest order of ability, directed to many phases of human endeavor.

Of all previous live-stock exhibits in connection with international expositions, while many have been on an extensive scale, there were none that in quality or variety would bear comparison with the one held in Jackson park. For this the main reason is that the general scope of the display was outlined by the representatives of all the great live-stock associations of the United States, about seventy in number. When it was determined by the officials of the Fair to make live-stock one of its features, they solicited the coöperation of all the more prominent breeders, and with the result that these associations met in convention and a committee was formed to take charge of everything pertaining to the exhibit, its preliminary preparations, classification, premium lists, plans of buildings, and in a word to represent, in the discharge of its functions, the live-stock associations of the United States. From the beginning until the end, this committee has worked in perfect harmony with the Fair officials, and through their efforts it was brought about that a separate department was organized and a chief placed at its head. This segregation gave to it special prominence and had a marked effect upon foreign countries as well as

among the states. A special effort was made to secure coöperation with similar enterprises in Europe, through which the governments of European countries were brought into participation, for thus might they develop an increased demand for their stock. Especially were the Russian, the German, and French governments induced to make an elaborate display, not only bearing the entire expense, but offering large subsidies to exhibitors, though the Canadian government expended more money and made a larger exhibit than any of the foreign participants.

State exhibits were also stimulated by the appropriation of large amounts, and state pride as well as the emulation of exhibitors was encouraged to its fullest extent; Illinois heading the list in the contribution of funds



SECTION OF GRAND BASIN, WITH PERISTYLE IN THE BACKGROUND

and number of animals on exposition. Provision was made for showing about 3,000 animals at a time, first horses and cattle, then sheep and swine, followed by poultry. The highest types of the various breeds were collected; but surpassing all the rest was the display of horses, with thirty different breeds, all with established pedigrees, presented for inspection.

As an aggregation of all the principal breeds of live-stock in the civilized world, it is conceded that never before has this collection been approached. All that money and an appeal to the breeder's pride could do was done, and the result was a matchless display. The Russians sent their finest specimens, and under the direction of the czar, animals from his own stable were included in their collection, his brother, Count Demitry, also supplying a liberal quota. But the Germans entered into the competition more heartily than any European nation, a most energetic contest for the supremacy of the various German breeds making itself felt at an early date, and continuing unto the end. The largest number and one of the best collections were those of French blood, which numbered nearly one-fourth of all the exhibit of horses. The next in number and quality were the British breeds, and without a doubt, the finest types of all countries were included in this exposition. One of the most significant features from the American breeder's point of view was the choice assortment of females, this meaning that the best species have been transplanted to American soil; so

that in future we shall not depend on foreign countries for the most useful and valuable varieties of live-stock.

Another feature in this department was the magnitude of the interests which it represented, the value of all farm animals in the United States being estimated in 1893 at \$2,500,000,000, with 1,350,000 square miles of territory devoted solely to the raising of cattle, mustering at that date about 54,000,000 head. Of horses the number may be stated at 15,000,000; of mules, 2,500,000; of swine, 55,000,000, and of sheep, 47,000,000, with a wool clip of 300,000,000 pounds a year, and dairy products that find their way to market worth at least \$15,000,000, while as to the value of such products raised for domestic consumption there are no reliable data.



TYPICAL AMERICAN-BRED STALLION

It is probable that our live-stock industries, as exemplified at the exhibition, exceeded in value those of all foreign participants combined. In Great Britain and Ireland, with half our population, the area available for pasturage is less than four per cent, and the number of animals, except for sheep, not more than fifteen per cent of the figures estimated for the United States. In France and Germany the number of farm animals may be stated at 50,000,000 for each, or about the same as in the British isles; Russia has perhaps twice as many, and adding to these a few millions for the dominion of Canada and other countries here represented, we have a total of some 260,000,000 against nearly 200,000,000 for the United States, the difference in number being more than compensated by a higher average of prices. Some of the largest stock-raising countries in the world sent no exhibits to the Fair, as the Australian colonies, the South American republics, and others whom distance debarred from participation.

Cattle farming has ever been a favorite pursuit in the United States, and in few industries have so many large fortunes been made, often on the smallest modicum of capital. While within recent years profits have been greatly curtailed by the encroachments of husbandry, coupled with drooping prices, the business is still of large proportions in all the more sparsely settled regions, westward from the Mississippi river to the Pacific



READY FOR INSPECTION

ocean, and southward from the upper Missouri to the gulf of Mexico. Vast herds and ranges are as numerous as ever, and especially on the Pacific coast, where single firms and individuals own 20,000 to 30,000 head, with lands of larger area than many a European principality.

As to breeds, the preference in money value is given to short-horns, a stock imported from England at least as early as 1785. But, as I have said, we no longer depend on foreign countries for this or any other variety of cattle. To-day the American short-horn has no superior, and not a few of our choicest animals have even been exported to Europe for breeding purposes. As beef cattle, for milking purposes, and for heavy farm work, they are much in favor, while also largely used for improving the grade of native stock. The Hereford is an excellent beef producer, and as a milker, the Ayrshire ranks second only to the Alderney, the former being prized for cheese-making and the latter for the making of butter. So also with certain of the Dutch and Scotch breeds, the polled Angus

and Galloway especially gaining in favor as among the hardiest of stock and the choicest of beeves and milkers.

Of horses the exhibit ranged from the hugest of draught animals to the smallest of Shetland ponies, with all the more prominent varieties valued for power or speed. The heavier draught-stock still consists largely of the offspring of English cart-horses, though greatly improved in breed. The Clydesdale is also a favorite animal, and for a strong and showy coach-horse the Cleveland bay is gaining in favor. The Norman, with his sturdy limbs and massive neck and shoulders, is valued for strength and endurance, especially the Percheron, in which is probably a tempering of Andalusian blood. The Conestoga, so called from its native home in the valley of that name, is supposed to be of German origin, and is the only variety peculiar to the



JUDGING THE CLYDESDALES

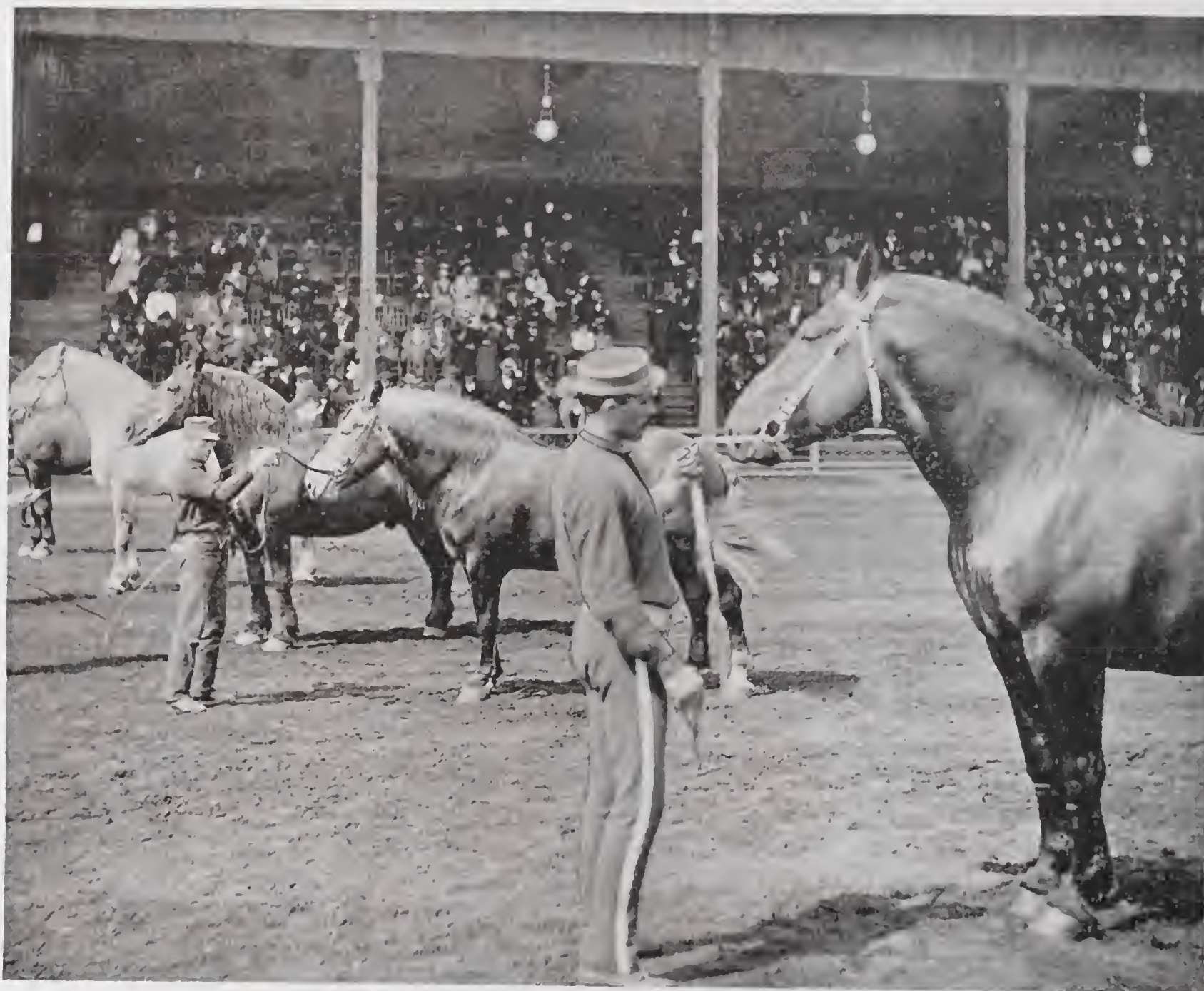


A TRIO OF CLYDESDALES

United States. It is a large and muscular animal, sometimes exceeding seventeen hands in height, and with the build of an English dray-horse, though lighter of limb and less encumbered with flesh.

The trotting-horse is the most distinctive of American breeds, with gait and pace unrivalled elsewhere in the world. Here is probably no particular strain, but rather the result of breeding from the choicest specimens and of constant practice on suitable roads and tracks. Certain it is that our best trotters have come from various stocks, as the Morgan, the Canadian, and the English thoroughbred; but all the best types are distinctly of home development, carried to a point with which there are none to compete. It is not many decades since a 2:40 horse first made his appearance on the turf; in 1870 a speed of 2:30 was almost unheard of, and when, a few years later, Maud S. covered her mile in 2:08 $\frac{3}{4}$ and her half mile in 1:03 $\frac{1}{2}$, this record was the wonder of the sporting world. Yet it is predicted that among the marvels of the nineteenth century will be the trotting of a mile within two minutes or less.

As to the exhibits of sheep a word may also be said by way of introduction; for here is represented a most important branch of industry, especially in the far west, where alone can be had a natural food supply



AN ARRAY OF PERCHERON BEAUTIES

sufficient for extensive herding. The bunch and other grasses of the plains and foothills are excellent pasturage, and when cured as hay, will keep the flocks in good condition during the winter season. Alfalfa can also be profitably raised for the purpose, at least for the choicer breeds, while for the greater part of the year the sheep is self-supporting, eating that which no other animal will eat, clearing the ground of weeds, and otherwise serving as a scavenger.

"England," it has been said, "is a mutton and the United States a wool country;" for the raising of a superior grade of wool does not consist with the production of finely

flavored meat. The merino, with its average fleece of four or five pounds and at times as much as a score of pounds, is here the favorite variety, and of this with its cross breeds consist at least 80 per cent of our flocks. The Southdown and Cotswold have been largely imported, more for their mutton than their wool, though the latter is of merchantable quality and with abundant clip. The Leicester is also valued for carcass and fleece, with wool of long staple but deficient in certain qualities. Among others are the Cheviot, Lincoln, Dorset, Shropshire, Hampshire, Spanish and Saxon merinos, the last from the original offspring of Spanish stock imported into Saxony as early as 1765. Except in Vermont, where perhaps are the choicest of American flocks, there are few whose blood is entirely pure, this not altogether the result of carelessness but at times with a view to combining the benefits of various strains. On the Pacific slope, where is more than one half our supply of sheep, Spanish, Australian, and American breeds have been blended with fair results, and here, until the progress of settlement absorbed the more valuable ranges, sheep-farming was the most steadily prosperous of all the western industries.



GERMAN COACH HORSES

For the conduct of the live-stock exhibit excellent regulations were framed by the chief of the Live-stock department. Exhibitors must have been the owners of animals intended for display for at least sixty days before the date of application, and must furnish a copy of the certificate issued by the association in whose register the animals were entered. Any misrepresentation would subject the exhibitor to the forfeiture of his rights and the exclusion of his exhibits. No vicious or fractious animals would be admitted, and all animals from foreign countries would be subject to quarantine regulations. Participants must furnish their own attendants, who would be required to obey the rules, to keep thoroughly clean the stalls and the grounds adjacent, under penalty of instant expulsion. A veterinary surgeon was appointed, whose duties included a thorough examination of the animals, before being admitted at the gates, with a daily inspection and report to the chief, the right being reserved to remove without notice all sick or dangerous beasts.

The Live-stock buildings are in the southern portion of the grounds, where a spacious tract is covered by a number of plainly constructed barns and by a circular pavilion somewhat resembling the colosseum. The latter lies south of the court of the obelisk, is 380 feet in length by 250 in width, and while not more than one third as large as its Roman prototype, is sufficiently commodious for the purposes for which it was designed. In the ten tiers of seats contained in the amphitheatre there is accommodation for 10,000 visitors, with access through four main entrances and eight smaller ones. The structure is roofed with iron, the show-ring being uncovered, and though of massive appearance, the grayish-white walls are of staff. Opening into the surrounding avenues are the offices of the live-stock commission and the headquarters of various journals which are organs of the agricultural classes. Here also is a bureau of information and a well appointed restaurant.

The judges' stand was erected in the centre of the arena, their duties commencing after the animals had been exercised for two hours in the ring, the continual process of examining, judging, and the announcement of decisions being enlivened by music and tests of speed among horses of various breeds and nationalities.

Most of the sheep, hogs, and other small varieties of live-stock were examined by the judges within or near the barns reserved for them, the pavilion being specially built for the display of cattle and horses, which



A PRIZE ANIMAL

were driven to it almost daily from about the middle of August to the middle of September. On the 25th of the latter month swine and sheep entered the contest, occupying the barns which had been vacated by the larger animals. During the season poultry had also their day, while toward the end of October the leading breeders of the lighter grades of horses in the United States and Canada, comprising the thoroughbred, trotting, and coach varieties, organized an elaborate exhibition. Included in the display of horses were jacks and jennets, angora goats, of which there was a large collection, forming a class of themselves. Thus it will be seen that



the Live-stock department, like several others of the Fair, was a shifting panorama, and is better described in the form of a narrative than in the present tense.

The first exhibits forwarded to Jackson park consisted of a band of Morgan horses and a herd of cattle from Vermont, these being followed soon afterward by Canadian thoroughbred horses and cattle, of which nearly sixty car-loads arrived in a single day. A week or two later there were on the ground 1,200 head of cattle and 800 horses. As to the extent and variety of the display, with the relative participation of states and nations, a brief description is afforded in the official statement reproduced in the note subjoined.¹

The display of horses opened with a competition among those of the Suffolk Punch breed, so called from their compactness of form, and from the English county where they have been raised for many centuries, though probably of Scandinavian origin. At one time this stock was coarse in shape and slow of pace, but of late has been much improved, and nowhere more so than in the United States, now ranking among the most valuable of draft horses and one that takes kindly to the yoke. In this class the honors fell to Peter Hopley and company, of Lewis, Iowa, to whom were awarded 17 out of the 21 first premiums offered. Blazer was pronounced the best stallion of his breed, and Bragg the finest mare. In addition to money awards, gold medals and silver cups offered by American and British associations, were captured by this firm.



FROM THE IMPERIAL RUSSIAN STABLES

The exhibit of Suffolk Punch horses was followed by a choice display of French Percherons within the pavilion, and a brisk competition for honors. There was a large number of competitors, and the extent of territory from which the animals were drawn was very broad, embracing as it did Illinois, Minnesota, Wisconsin, Michigan, Iowa, Nebraska, and Canada. In the final division of honors, twelve first premiums fell to M. W. Dunham, his large contingent of Percherons coming from the Oaklawn farm, at Wayne, Illinois.

¹ LARGE BREEDS OF CATTLE: Shorthorns, 233; Herefords, 140; Aberdeen-Angus, 72; Galloway, 78; Devon, 71; Holstein, 67; Red poll, 70; Polled-Durham, 30. SMALL BREEDS: Jersey, 243; Ayrshires, 129; Guernseys, 49; Brown Swiss, 54; Dutch belted, 16.

HORSES AND MULES: Clydesdales, 187; Percheron, 155; Suffolk Punch, 21; Shire, 49; French draft, 94; Belgian, 67; Arab, 6; American Arab, 17; Thoroughbred, 26; Cleveland bay, 48; French coach, 63; German coach, 92; Hackney, 32; Morgan, 66; jacks and mules, 49; saddle, 46; Standard trotter, 45; Russian trotter, 18; French trotter, 23, and Shetland pony, 85.

Of state and Canadian entries the following was the proportion. HORSES: Illinois, 220; Iowa, 137; Michigan, 75; Wisconsin, 74; Minnesota, 64; Canada, 55; Vermont, 50; Indiana, 46; Missouri, 42; New York, 39; Kentucky, 36; Nebraska, 18; Tennessee, 4; West Virginia, 3, and one each from Ohio, North Dakota, Kansas, and Pennsylvania.

CATTLE: Canada, 234; Illinois, 172; Minnesota, 154; Ohio, 99; Missouri, 83; Indiana, 78; New York, 67; Pennsylvania, 59; Iowa, 59; Vermont, 49; Kansas, 42; Nebraska, 42; Kentucky, 33; Michigan, 17; Maine, 13; North Dakota, 10; Massachusetts, 1.

His stallion, La Ferte, was the winner of the first prize, strengthening the position reached some years before, when in competition with the Clydesdale and Shire breeds, he won the championship as the best draft stallion of any variety.

In the above competition it was observed that Minnesota received many of the second premiums, and at the ensuing tests between Clydesdales this state was *facile princeps*. Many of the first premiums fell to N. P. Clark, of St Cloud, and included those for the best stallion bred in Scotland, the most valuable mare bred in Scotland or America, and the finest of either sex upon the grounds. His strongest competitor was Robert Halloway, of Alexis,



SHETLAND PONIES FROM IOWA

Clydesdale, is nearly as large, and though somewhat quicker in action, is mainly used as a cart or dray-horse.

On a special occasion Clydesdale, Shire, Percheron, French draft, and Belgian horses were in the ring at one time, with Russian horses driven under saddle, and Shetland ponies, single, double, tandem, four-in-hand, and four abreast, thus bringing home to spectators that even in the matter of live-stock they were attending a world's fair. The cosmopolitan nature of the exhibit was further emphasized by the appearance of several beautiful animals of the Arabian

Illinois, who, besides taking several first premiums, was adjudged to possess the most valuable stallion bred in America, the prize being given by the Clydesdale society of Great Britain and Ireland.

That Shires and French draft horses thrive well on the prairies of Illinois was evident from the appearance of the animals which next entered the arena. With few exceptions they were raised in that state, the draft horses from the Oaklawn farm showing that here was as successful a breeding ground for this class as for the Percherons, while Burgess brothers, of Wenona, took the prize as Shire breeders. The Shire, it may be remarked, is the largest and most powerful of all English horses, claiming as his progenitor the mail-clad war-horse of ancient times. He is now used for the heaviest kinds of work, as for ploughing, and hauling such cumbersome articles as steam-engines, threshing-machines and brewers' drays. His Scotch brother, the



A TENNESSEE TWO-YEAR OLD

and American-Arabian breeds, for which three of the exhibitors had won the highest premiums, Jacob Keyl, of Milwaukee, for both classes, M. W. Dunham, of Wayne, Illinois, and J. B. Hall, of Toronto, Canada, for those of mixed breeds. This was considered Iowa's special day, the state band furnishing the music, the state itself supplying nearly all the Belgian horses, so much admired, while to Van Volson brothers and A. B. Holbert, of Greeley, fell the honors awarded to Iowa's exhibits.

A few days later, W. J. Buchanan, the chief of the Agricultural and Live-stock departments, marshalled the prize-winners and those who were still to be honored, for a parade through the Exposition grounds. Moving from the stock pavilion, a detachment of Columbian guards was followed by the Iowa state band, and by the chief in person, driving a noble looking animal. Behind him came a string of tiny Shetland ponies, whose reins



ROY WILKES, A FAMOUS AMERICAN STALLION.

were held by boys and girls, followed by Russian horses, American riding horses, German and French coach-horses, native and French trotters, Morgans from Vermont, Arabian steeds, Clydesdales, Percherons, French draft, Shires, Belgian, and Suffolk Punch horses. Most of them were led by grooms in native costume, and where honors had been awarded, the bright premium ribbons fluttered from their heads—blue for first prizes and red for the second. Thus 600 of the finest animals ever gathered together passed through the principal avenues of Jackson park between serried lines of spectators, and here was in truth a collection, culled from every quarter of the world, which taken in its entirety has never before been equalled in the annals of show-yard exhibitions.

The closing days of September were mainly devoted to the famous English breed of Cleveland bays and the coach-horses of France and Germany. The coaching horse of England and the Cleveland bay are almost identical, and now are used for the plough, for heavy carriages, and for slow driving. In the latter class most of the entries were by Illinois breeders, who captured nearly all the first and second premiums, the majority of the prizes falling to Stericker brothers, of Springfield, and George E. Brown, of Aurora. As to the French coach-horses, the most extensive exhibit was made by the Oaklawn farm of Illinois, the competition increasing the number of its prize animals to a total of 111. Its entries of Percheron and French coach-horses mustered in all 500, the animals which were exhibited in a special building forming an additional attraction.

Alluding to the entire exhibit of French coach-horses, the judges make the following remark in their report to the bureau of awards: "Surely the grand and unequalled specimens of the equine family found in this



SECTIONAL VIEW OF AGRICULTURAL BUILDING

department were all the most enthusiastic admirers of the breed could desire or hope for." In this exhibit no less than 68 animals came from the Oaklawn farm, and to these were allotted 49 first prizes, including sweepstakes and awards of honor, five of them being also winners of first prizes at the Paris Exposition of 1889.

Among the latter was the chestnut stallion, Indre, who in the front rank of the parade attracted general attention by his stately carriage and bold, powerful step. So also with the bay stallion, Perfection, a carriage horse of remarkable beauty, with long but graceful curve of neck, lofty bearing, easy movement, and form as powerful as supple. In his offspring, descended through ten generations of ancestors without a flaw in pedigree, was also noticed his own tenseness of nervous organization. Other first prize stallions were Lord, a four year old bay; Urban, a two year old chestnut of perfect symmetry, style,

and action, and Monaco, a two year old bay, with all the force and more than the stature of his sire, Indre. In the second line was the black stallion, Aguadel, a rival of Indre in the class of aged French trotters, and with him a number of mares and of colts and fillies, of which 23 prize-winners were sired by Indre and Perfection.

There was substantially no contest between French breeders of these famous stocks and American breeders of the varieties originally imported. Of German coach-horses, however, there were many exhibitors from the Fatherland, as well as from Illinois and Iowa. The final result was an almost even division of the honors among the three chief contestants, the advantage, if anything, lying with foreign participants. Ulfert Poppen, of German valley, Illinois, was one of the most successful, and many of the competitors from that state or from Iowa were of his nationality. Thus, while the stock bred on German soil may have had slightly the advantage as to ribbons of honor, it was, in the main, a contest restricted to a single nationality.

The competition among the coach-horses of English, French, and German breeds was concluded during the month of September, after which a week was set apart for hackneys and Morgans; jacks, jennets, and mules; saddle-horses; Russian and French trotters, and Shetland ponies. When all was over, it was decided that the best hackneys were those from Nebraska and Canada, and that Vermont and Kentucky breeders excelled in the Morgan class, but with Illinois and Indiana not far behind. As to mules, jacks, and jennets, the result was in favor of Missouri, though abundant honors were also bestowed on Illinois, Kentucky, and Tennessee.

Among Russian trotters the czar's horses had no worthy competitors, while Dunham once more gathered all the premiums for his French breeds. The picturesque features of the show were furnished by the saddle-horses and Shetland ponies. As the former were put through all their paces, the live-stock arena was converted into a circus ring, the contest



GROUP IN PLASTER NEAR GONDOLA LANDING

being intensified by the forthcoming prize, to be presented by Chief Buchanan himself, in the form of a handsome silver cup. The trophy was awarded to J. T. Crenshaw, of Todd's Point, Kentucky, "Monte Cristo Junior" being the name of the steed.

To children the exhibit of Shetland ponies was one of the most attractive features of the Fair, as also was the group of tents containing a band of Wisconsin ponies. Among the former, about fifty in number, were colts and weanlings, some of them not more than twenty pounds in weight, but "ready," as one of the exhibitors remarked, "to grow up with the children and become useful and companionable." The animals were broken to saddle and harness, the latter either as singles, spans, tandems, or four-in-

hands, and beside them was an assortment of pony carts, with equipments to match. The largest groups were from the Pittsford farms, New York, and from Maquoketa, Iowa, the former displayed by E. F. Hawley and the latter by J. M. Hoag. It was in fact the east pitted against the west, and if the children could have had their way, every pony that entered the lists would have received a ribbon; but the judge was obdurate, awarding one first premium and six of the minor class to the New York collection, with blue ribbons to the stallions of Robert Lilburn, of Emerald grove, Wisconsin, and a mare owned by G. A. Watkins, of Detroit, Michigan. The Shetland and Wisconsin pony shows closed the main series of competitions in horse flesh.

One of the most noted stallions on exhibition was Roy Wilkes, whose record in turf annals consists of one continuous series of victories over such horses as Mascot, 2:04; Guy, 2:06 $\frac{3}{4}$; Manager, 2:06 $\frac{3}{4}$; Major Wonder, 2:09 $\frac{1}{4}$; Riley Medium, 2:10 $\frac{1}{2}$; Grant's Abdallah, 2:10 $\frac{1}{4}$; Dallas, 2:11 $\frac{1}{2}$, and Brown Hal, 2:12. He not only



GALLOWAY COW



PRIZE BULL AND COW OF JERSEY BREED

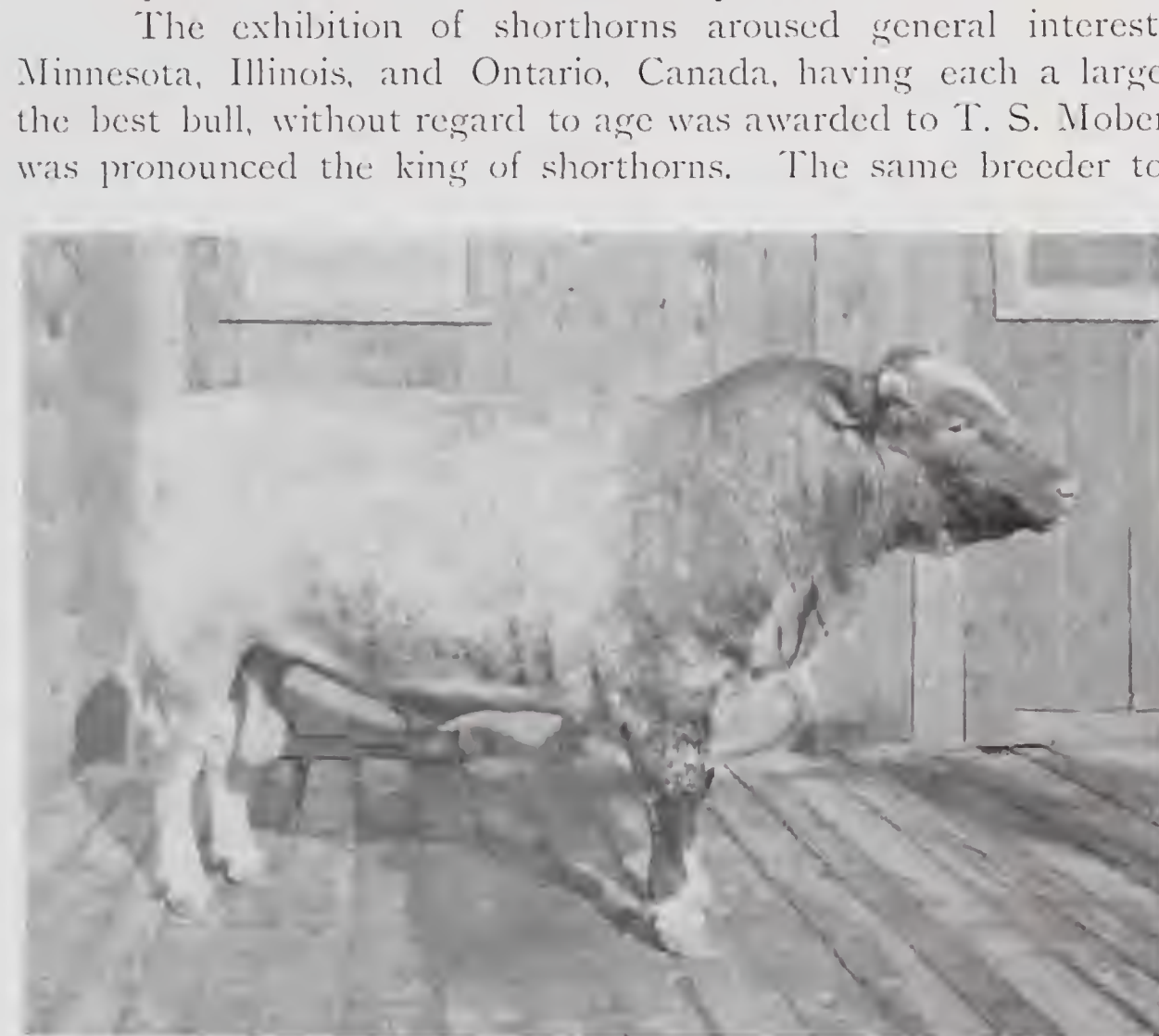
captured the first premium for stallions of five years and over, but holds the world's record, 2:06 $\frac{1}{2}$, for stallions in a class race, without a runner to prompt. Roy Wilkes has earned the world's stallion record, 2:08 $\frac{1}{4}$; the world's record to a wagon, 2:13; the record for a quarter mile, 27 $\frac{3}{4}$ seconds and the two fastest heats in a race for a stallion, 2:06 $\frac{1}{2}$ and 2:08 $\frac{1}{4}$. It is, furthermore, a noteworthy fact that a veterinary surgeon representing the Government department was sent to secure measurements of the animal, and after thoroughly doing his work, pronounced the animal a perfect type of the American trotter. Naturally, therefore, the progeny of Roy Wilkes, both pacers and trotters, have shown remarkable speed. The home of this animal is at the Calumet stock farm, in the neighborhood of Geneva, Illinois, and he is described by an admirer "as a dapple seal brown of the richest color imaginable, his coat being as glossy as the finest satin. In height he is 15 $\frac{3}{4}$ hands, and weighs in the neighborhood of 1,200 pounds, in bodily conformation reminding one of old George Wilkes. He has a massive neck nicely cut up at the jowl, built on the Patchen line; but there is the broad breast, barrel perfectly ribbed up, shoulders sloping to suit the most fastidious, a back second to none on any race horse, indicating strength par excellence, and the legs of the Wilkes, with wide, flat bone, braced with muscles at every point. His hocks are simply perfection; he has a fine head, perfect

muzzle, bright intelligent eyes, a pair of well shaped ears of medium length, and is of the most kindly disposition. Noticeable points in his make-up are his mane and tail, the latter being a waving mass as black as ebony and sweeping the ground. In fact, there is no white upon the entire body except a faint star upon the forehead."

As to the cattle show it will be seen by reference to the official list, already quoted, that the display of Canadian cattle was much more extensive than that of any of the states, and as will presently appear, the dominion was rewarded with a large proportion of the highest premiums.

The result was the more gratifying to our neighbors beyond the lakes, since nearly all the breeds selected for competition were of British types. Leading the list, in the order of the series, was the short-horn, the best of English breeds, and one adapted to all climes and countries. Next was the red and white Hereford, docile and easily fattened, followed by the hornless Scotch breeds, the Aberdeen-Angus, and the Galloway. The Jersey and her more homely and larger sister, the Guernsey, showed their best points, and between these exhibits came the famous Holstein-Friesian, of Germany. The well-built Devon, whose production of juicy beef from the scant lands of her native shire is one of the mysteries of nature, was also represented, with the Scottish Ayrshire, famed as a cheese maker. Then there were red polled cattle and polled Durham, hornless as their names imply, with the Dutch belted and the small brown beauties of Switzerland, both suggestive of the dairy house and the cheese press. The tests conducted throughout the Exposition season for determining the value of different breeds for dairy purposes were under the supervision of a separate bureau, and have already been described in connection with the Dairy department.

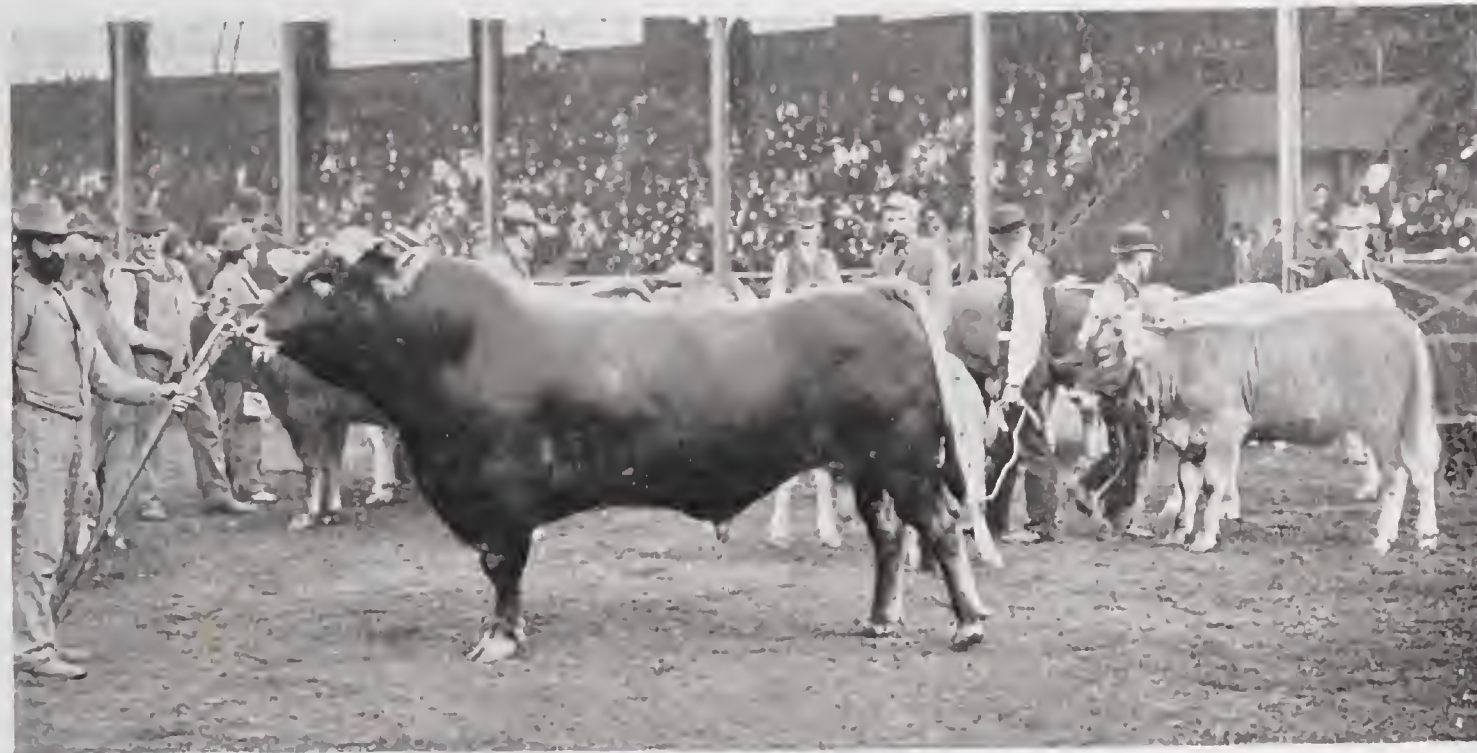
The exhibition of shorthorns aroused general interest among breeders, Kentucky, Missouri, Indiana, Minnesota, Illinois, and Ontario, Canada, having each a large number of participants. The first premium for the best bull, without regard to age was awarded to T. S. Moberly, of Richmond, Kentucky, whose "Abbottsburn" was pronounced the king of shorthorns. The same breeder took the first prize for the finest two or three year old heifer; but the best herd was pronounced to be that of H. F. Brown, of Minneapolis, Minnesota, the first premium for cows going to J. G. Robbins and son, of Horace, Indiana. For the most valuable young herd, consisting of one bull and four heifers, all under two years, the first prize was taken by J. and W. Russell, Richmond Hill, Ontario, and for the best cow of any age by J. G. Robbins and sons, of Horace, Indiana.



CHAMPION BULL, TWO YEARS OLD

time came for the Scotch breeds of Galloways and Aberdeen-Angus, it was evident that Indiana, Minnesota, and Ontario were to be prominent in the former, and Missouri, Illinois, and Iowa in the latter. In the Aberdeen-Angus competition most of the first premiums were awarded to Wallace Estill, of Estill, Missouri, and for Galloways to the Brookside farm at Fort Wayne, Indiana, and Hugh Paul, of Dundee, Minnesota. Ontario breeders took a number of minor prizes, those of the first class falling to William Kough, of Owen Sound.

Thus ended the competition between the various breeds of beef cattle, dairy animals being next in order, and first among them, Jerseys. In this class entries were numerous from Missouri, Illinois, and Minnesota;



SEGMENT OF THE CATTLE RING

but, as a rule, the highest premiums were awarded to Pennsylvania and New York. The herd of Jerseys exhibited by T. S. Cooper, of Lehigh county, Pennsylvania, was of excellent quality, taking fully one half of the many premiums offered, the prize for the best cow falling to C. A. Sweet, of Buffalo, New York. Eastern participants also carried away the majority of the honors in the Holstein-Friesian class, especially those from the empire state, the sweepstakes for the best bull going to D. F. Wilber, of Oneonta, New York; for the best cow to C. V. Seeley, North Farmington, Michigan.



THE DAIRY BUILDING

The cattle show closed with the competition among other English and Scotch breeds, and the Dutch belted and Brown Swiss cattle, for the grand sweepstakes to be awarded according to age and for general merit. Canadian exhibitors were made glad when the premiums were allotted for Devon and Ayrshire cattle, sweeping all before them in the latter class, with Daniel

Drummond, of Montreal, as the largest prize winner. For red polled cattle Iowa was in the front, many of the exhibitors coming from that state, and nearly all the first premiums falling to J. H. Gilfillan, of Maquoketa. In Dutch belted cattle Pennsylvania was at the head, represented especially by H. B. Richards, of Easton, while all but one of the fifteen premiums for the Brown Swiss breed fell to Abraham Bourquin, of Nokomis, Illinois.

The last days of the cattle show were enlivened by a grand display in the ring of all the cattle exhibited, and a special parade of Canadian stock, the season concluding with the general competition. The sweepstakes for the best herd of beeves was taken by J. G. Robbins, of Horace, Indiana.



WITHIN THE LIVE-STOCK PAVILION

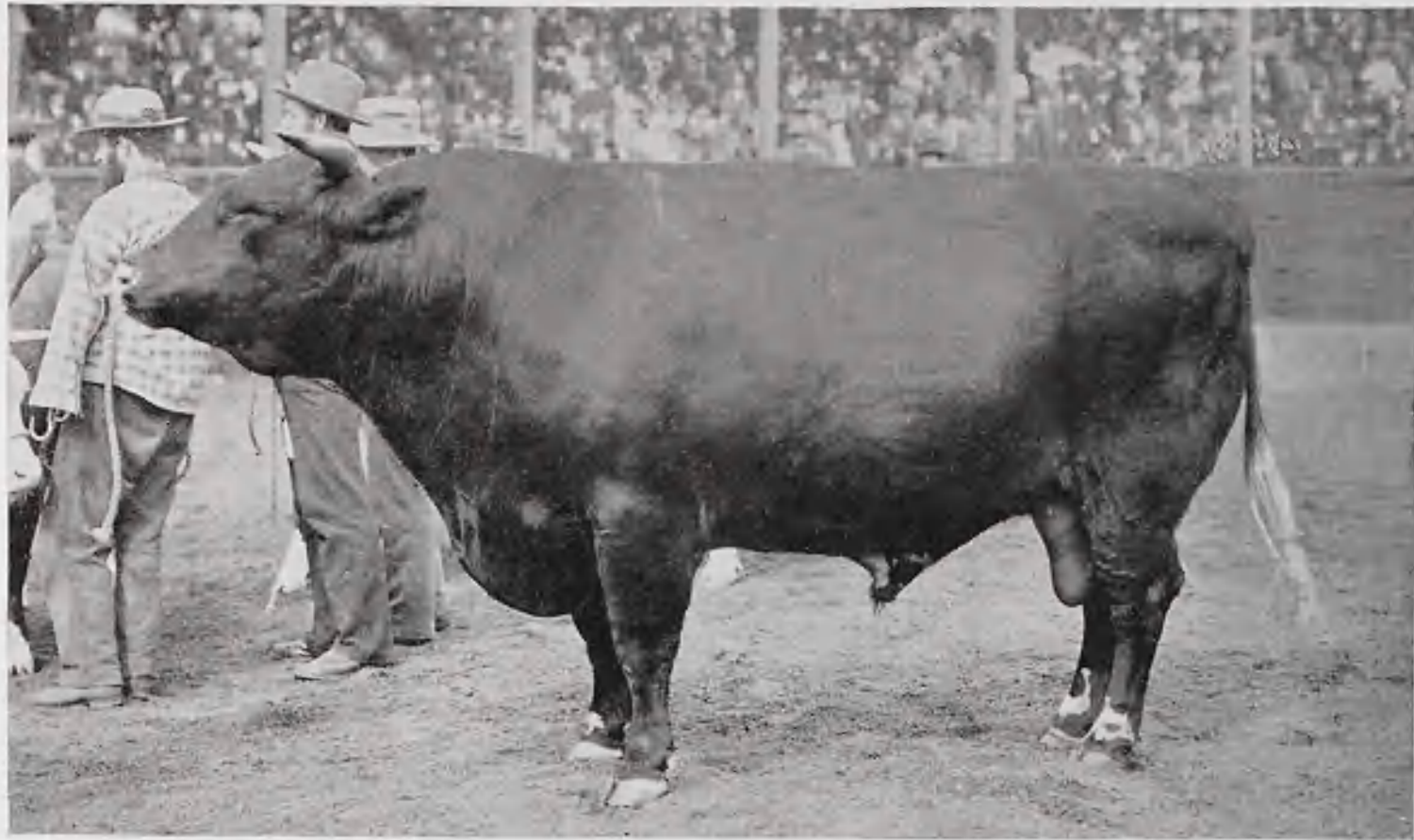
Sheep and swine were on exhibition from September 25th to October 13th, about 3,000 head of both being entered. For the best sheep awards were made to exhibitors of Cotswold, Leicester, Lincoln, Cheviot, Dorset, Southdown, Shropshire, Oxford, Hampshire, and merinos, in the order named, Angora goats being

also included in these classes. The largest number of entries was of merinos, delaine-merinos, Southdowns, and Oxfords. Ohio, Missouri, Michigan, Illinois, and Vermont took most of the premiums for delaines and merinos, Ontario presenting an excellent display of such English breeds as Lincolns and Southdowns. John Jackson and sons, of Abingdon, were the prize-winners in the latter class, and in the group of Angora goats, as also in the special class of

Persian or Astrakhan sheep, C. P. Bailey, of San José, California, won the first and second premiums in all the sections. These beautiful animals shared a building with a large flock of Cotswold sheep, exhibited by a Wisconsin breeder, who captured a number of prizes.



LOOKING UP THE NORTH CANAL

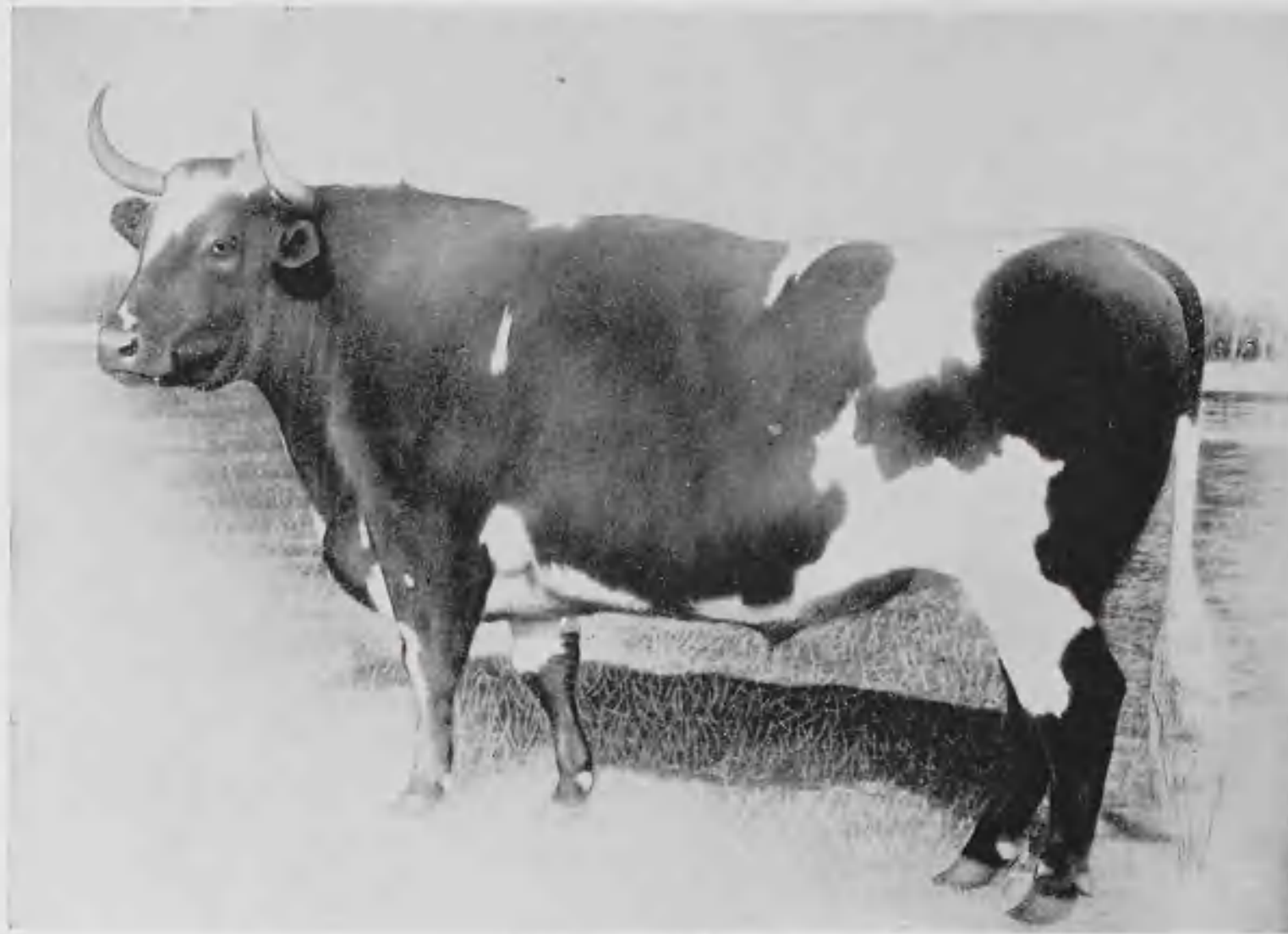


A MONSTER PRIZE WINNER

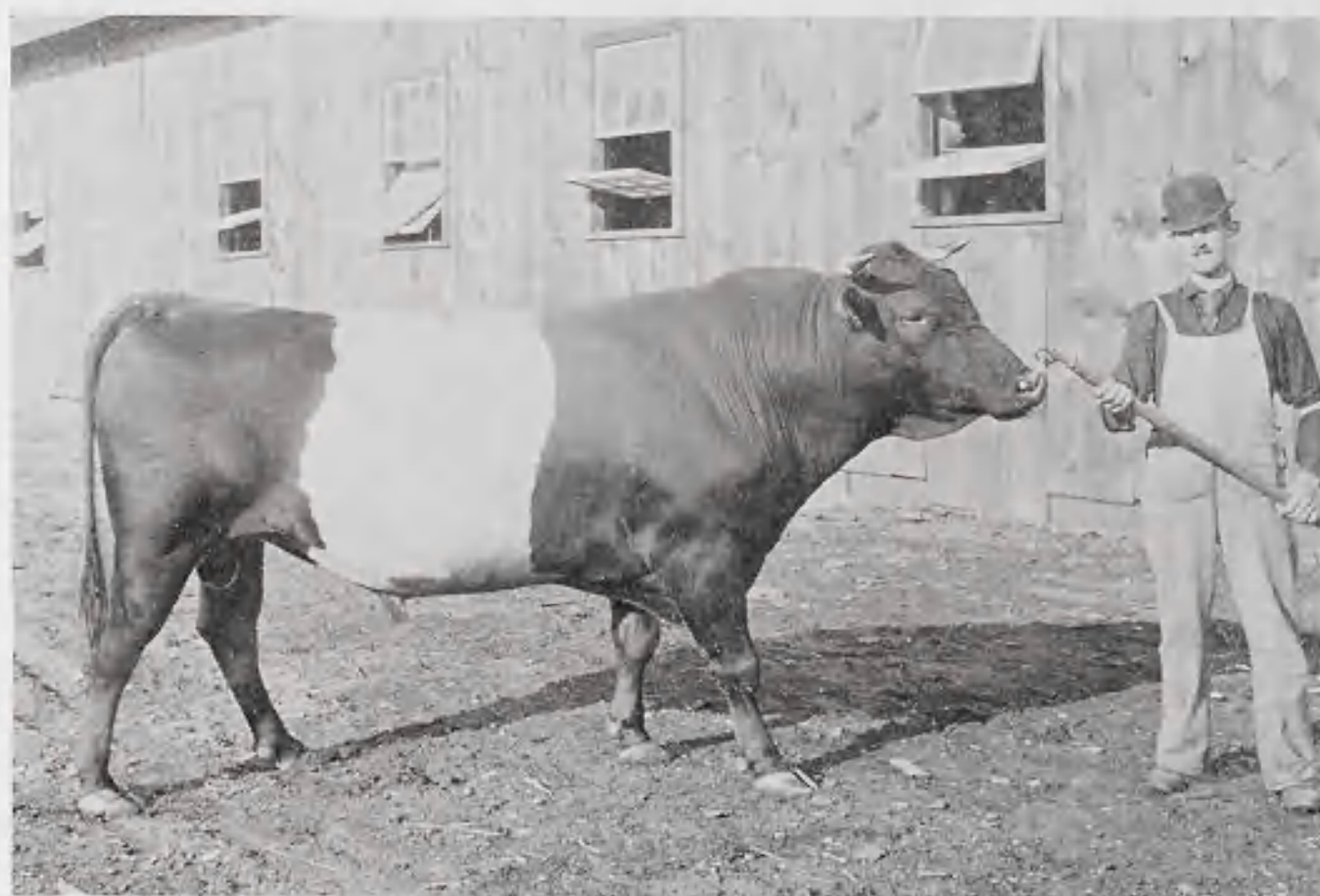
Among the noticeable exhibits of the Shropshire breed was the one made by A. O. Fox, of Oregon, Wisconsin, whose ram, "Kingstone," weighing 350 pounds, took the first prize as the largest yearling on the grounds. Across the way, in the Ontario section, was Newton Lord, a famous Shropshire ram, the English and Canadian prize-winner in former contests, and now the champion of the United States. In another building were the Oxfords, from the Summer Hill stock farm of Peter Arkell, of Teeswater, Ontario, who claims to be the first American importer of this stock. From a

New York exhibitor came the only considerable flock of Cheviots, representatives of the hardy breeds which flourish in the lowlands of Scotland, another participant from the empire state showing several fine specimens of Pomeranian merinos, owned by Baron von Homeyer. Much interest was aroused by the competition for honors among the different breeds of rams, for which a number of valuable prizes were awarded.

Berkshires, Poland Chinas, Chester whites, Duroc-Jerseys, small Yorkshires, and the Essex, Victoria, and Cheshire breeds were the varieties of swine exhibited, premiums being awarded simultaneously with those for sheep. In the



LARGEST STEER IN THE WORLD



DUTCH BELTED BULL

swine division Ohio, Illinois, Indiana, Iowa, and Nebraska were prominent. A famous character among the Poland Chinas was "Black Wilkes," the prize-winning boar, weighing 800 pounds, but as spry as a yearling. He is owned by Taft and company, of Humboldt, Iowa, and has a long list of celebrated ancestors. The comparatively modern breed of Duroc-Jerseys was well represented, J. M. Stonebraker, of Panola, Illinois, the pioneer raiser of this stock, exhibiting among his herd the boar "Exchanger," now famous throughout the country. His weight is 900 pounds, notwithstanding which he is said to be light of foot.

The last two weeks of the Fair were devoted to the display of fat stock and

light draft horses. Although breeders were not debarred from the latter competition, it was specially designed for individual owners of fine horses. Standard trotters, thoroughbreds, horses and ponies in harness, with equipages, comprised the exhibition, which continued for nearly a week. Entries were made from Illinois,

Indiana, Minnesota, Iowa, Michigan, Missouri, Kentucky, Tennessee, and Ontario, and among the breeds represented were Morgans, Arabs, American-Arabs, French, German, and English coach-horses, and trotters of the French and American classes. Medals and diplomas were given for points of excellence in animals, for equipage and appointments, and for skill in driving, and when the contest was for horses in harness, the prizes were divided as thus indicated, 50 per cent being allowed for the highest premium for the horse, and 25 per cent each for equipage and driving. Horses were driven singly, tandem, in pairs, three abreast, and four-in-hand, and yoked to broughams, phaetons, and such heavy vehicles as coaches and tally-hos. There were also special prizes, as for the most skilful lady driver and for the best appointed park tandem.

The fat-stock show comprised such breeds of cattle as short-horns, Herefords, Aberdeen-Angus, and Devons, premiums being given for the best of these breeds, for the heaviest steers, the best



A COTSWOLD BEAUTY

working oxen, and the finest herds. In this group were also Poland China, Berkshire, Essex, Duroc-Jersey, Yorkshire, and Victoria swine, with sheep of the Lincoln, Leicester, Hampshire, Cotswold, Southdown, merino and Shropshire grades. As in the competitions for dairy and breeding purposes, held earlier in the season, the cattle were judged in the Live-stock pavilion. In this connection also may be mentioned the trained cattle, displayed in the arena by a Connecticut owner, which, under the names of Jim and Tim, Jerry and Terry, delighted thousands of spectators while the monotonous work progressed of deciding upon the premiums.

Chicago is famous for her draft horses, and her merchants, manufacturers, and express companies combined to make an exhibit of animals, harness, carriages, wagons, and trucks, whose equal has not before been seen in the United States. Clydesdales, Percherons, Belgians, Normans, and other breeds were represented, the attendance indicating that cart-horse shows, so popular in England, had obtained a foothold in this country. During the forenoon of the 27th all the horses and wagons were registered at the stock pavilion, and after



OF THE CHEVIOT BREED



SPECIMEN OF SOUTHDOWN STOCK

the usual parade, returned there to be judged. Premiums were awarded on such points as the soundness and serviceableness of the animal; construction and adaptability of the vehicle and harness; general condition of animal, vehicle, and harness, as an indication of stable management; skill of the driver and tractability of the horse. Swift and company received the first premium for the most valuable six-horse team; Marshall Field and company for the best team of four horses; W. M. Hoyt for three-horse team; Swift and company for two-horse, and Gage, Downs and company for single horse equipage. For the finest wagons, the highest premiums were awarded to Swift and company and the American Express company.

"Do you know that the United States government statistics show the annual value of the



A PRODUCER OF FINE MERINO WOOL

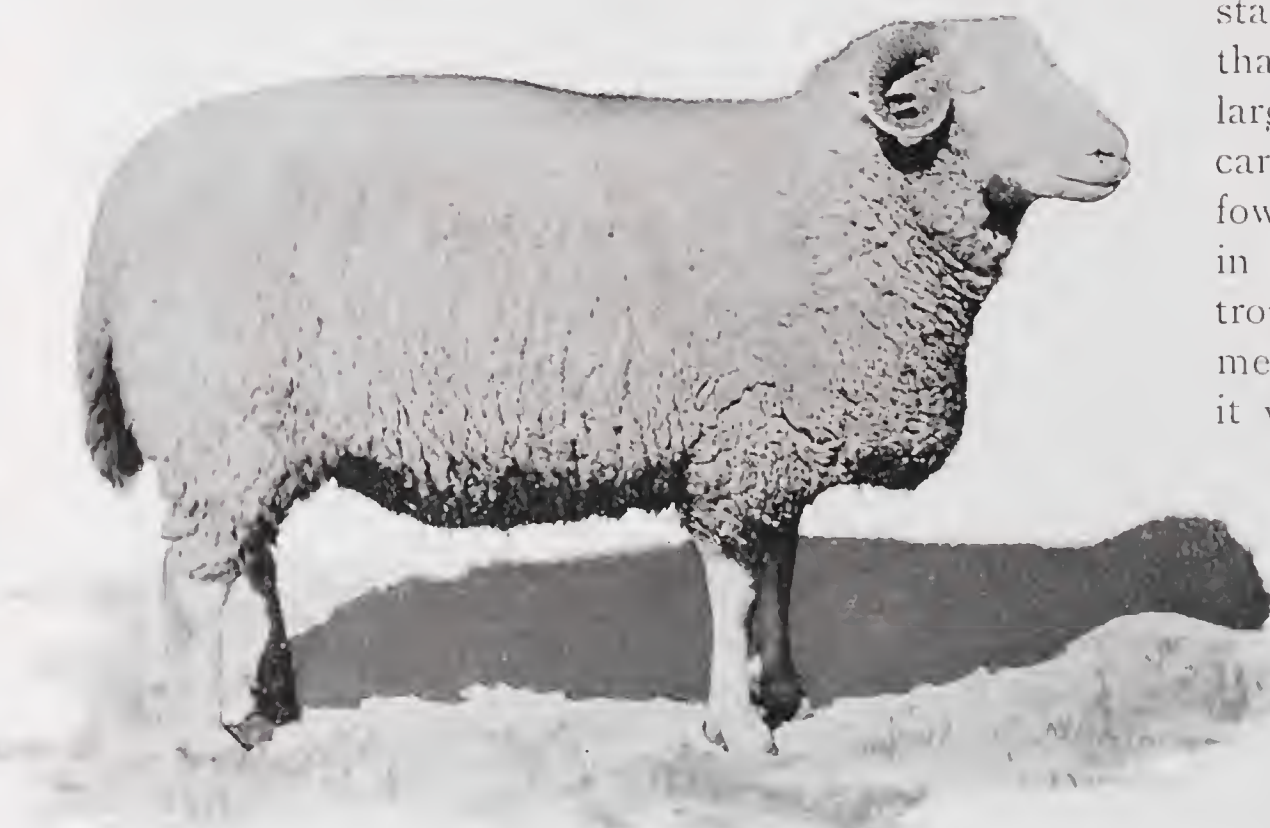
who make a specialty of fancy breeding. The display was on a much larger scale than at state and county fairs, and though containing no special novelties, was by no means devoid of interest. Here, for instance, one might compare the diminutive bantams, some of them weighing less than a pound, with the Brahmas, Shanghais and other Cochins, any one of which would outweigh a score of its tiny neighbors. White and brown Leghorns, black Minorcas, and many Spanish varieties were also on exposition, as well as Hamburgs, Dorkings, and Plymouth Rocks, the two last especially typical of England and the United States. France had also her contingents in the Houdan and Creve-cœur breeds, and Poland in her silver, golden, and white-crested specimens. Each exhibitor was restricted to four birds; but there were more than 4,000 entries in the different classes, representing a score of states, the dominion of Canada, and the republic of France. In point of numbers Plymouth Rocks led the list, followed by Brahmas, Polish of various strains, and Houdans, while of the participants Canada, New York, Ohio, Illinois, and Missouri were the most prominent.

Exhibitors both from the east and west were eager to explain their methods of hatching and raising, showing, as they asserted, the advantages of artificial incubation over the process which nature has provided. For a complete exposition of this phase of the subject the visitor was enabled to examine, in a separate building, a large array of apparatus representing manufacturers in Connecticut, Ohio, Illinois, Iowa, and other

states. Here the champions of artificial breeding claimed that the chickens hatched by machinery were not only larger and better at every stage of growth than those cared for by the mother hen, but developed into finer fowl, and took the premiums at all the important fairs in the United States. At an early stage of the controversy, they said, every one admitted that the artificial method was best for the raising of market poultry; but it was asserted on the other side that the male birds must be hatched by hens. When this theory was swept away at local exhibitions by the production of prize roosters hatched by the machine process, then, as the manufacturers would have us believe, the fancy fowl breeders adopted their incubators in a body; and now, throughout the eastern states, poultry raising has become an immense industry, prosecuted almost entirely by the inanimate hatcher and breeder. One of the



THE OXFORD BREED



DORSET HORNED SHEEP

states. Here the champions of artificial breeding claimed that the chickens hatched by machinery were not only larger and better at every stage of growth than those cared for by the mother hen, but developed into finer fowl, and took the premiums at all the important fairs in the United States. At an early stage of the controversy, they said, every one admitted that the artificial method was best for the raising of market poultry; but it was asserted on the other side that the male birds must be hatched by hens. When this theory was swept away at local exhibitions by the production of prize roosters hatched by the machine process, then, as the manufacturers would have us believe, the fancy fowl breeders adopted their incubators in a body; and now, throughout the eastern states, poultry raising has become an immense industry, prosecuted almost entirely by the inanimate hatcher and breeder. One of the



BROWN BESSIE, A PRIZE WINNER OF THE JERSEY BREED

device by which the trays of eggs could be instantly turned without opening the machine. To prove the validity of their claims, several manufacturers had their apparatus in practical operation, the broods of chicks running around their incubators of iron and wood as lively as though they had never known any other parentage.

In the poultry division were also included carriers, pouters, tumblers, trumpeters, homers, and other varieties of pigeons, Canada being as prominent in exhibits of this class as in others. An entire barn was set apart for the purpose, and in another were housed the turkeys, ducks, geese, rabbits, ferrets, and miscellaneous pets.

In conclusion it may be said that the exhibition of live-stock in all its departments, and especially of horses and horned cattle, was the best that was ever witnessed in the United States, and probably the best in the world. Nor could it well be otherwise considering the general interest aroused by the efforts of the committee in every section of the republic, in Canada, and in the principal stock-raising countries of Europe. It was in truth an international feature of an international exposition, and though perhaps somewhat of an innovation, could not have been omitted from a display in which all branches of human enterprise were to be represented; for this, as we have seen, is an industry of vast proportions, and one to whose further development there is no apparent limit.

strongest arguments in its favor is that the vital powers of the hen, overtaxed by sitting, are reserved for laying.

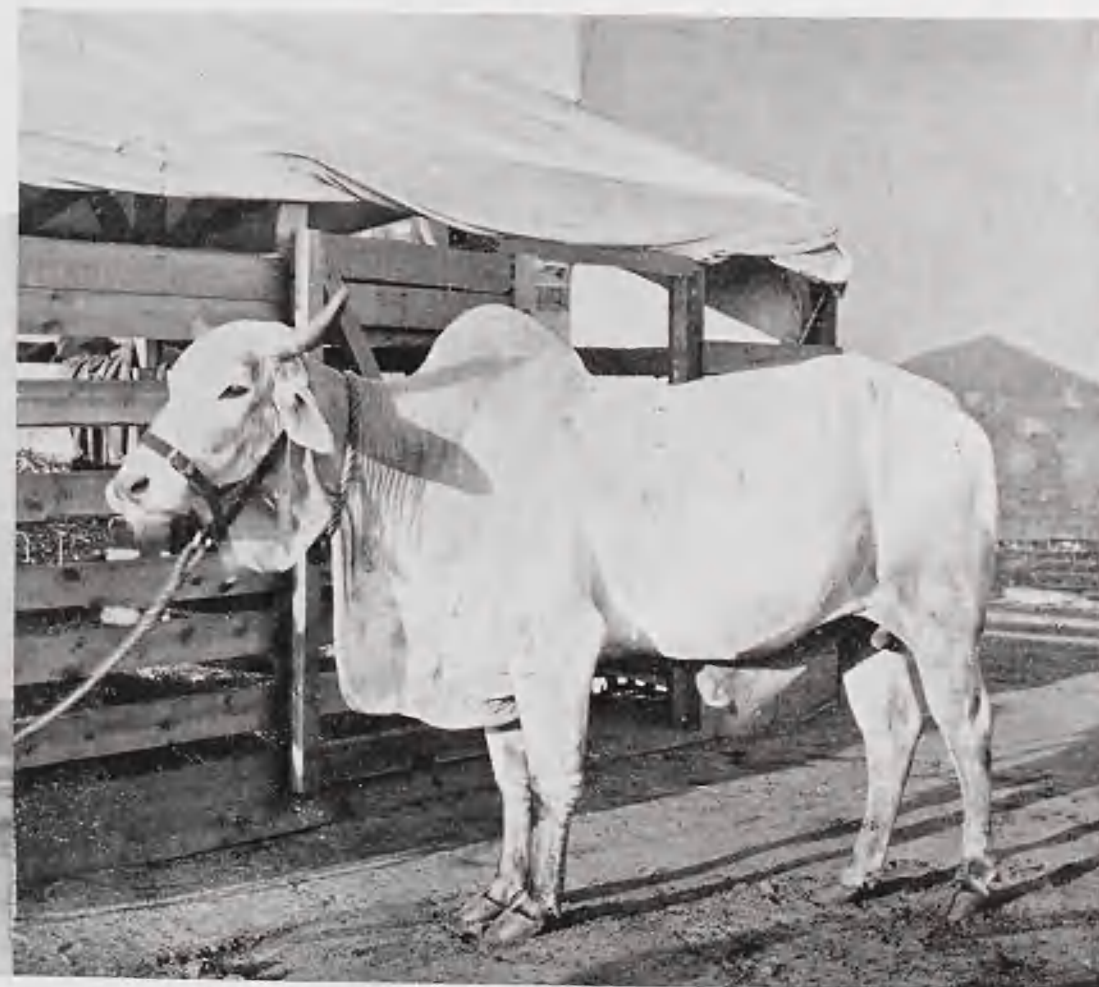
The incubators here displayed were heated either by hot water or air, the electric machine being installed in its proper department and described in the chapter on Electricity. In the incubators of a Springfield, Ohio, firm the hot water circulated through a galvanized iron tank; a vulcanized rubber bar was placed in a chamber just above the eggs, and when it became expanded by heat, the flame of the lamp was cut off through the lifting of a lever upon which the bar operated. When the temperature fell so as to contract the bar, the lever was lowered and the heat again admitted. Most of the machines were supplied with ingeniously contrived thermostats, or heat regulators, an Iowa patentee furnishing a



MARY MOIDEN, A PRIZE JERSEY COW



LILLY (SIGNAL) FLAG, A PRIZE ANIMAL



"SACRED COW" FROM THE WEST INDIES

WORLD'S FAIR MISCELLANY.—As stated, the live-stock exhibition did not open until August, but the pavilion was too desirable a spot to be overlooked by those who wished to give entertainments requiring considerable space. From July 4th until the formal opening of the department the English military tournament furnished exhibitions of athletic and manly feats, comprising wonders of marksmanship



RUSSIAN HORSE AND RIDER

and horsemanship. Upon their departure for Canada, two of the members of the company, Major James Lee and Corporal J. H. Evans, of the Life-guards, were presented with a gold watch and a gold medal, the former because of his skill in tent-pegging, and the latter for bravery at the fire in the Cold Storage building, on July 10th, described in a previous chapter.

A notable occasion was the wand drill of July 26th, in which nearly 3,000 turners participated. Through some misunderstanding on the part of the management, the pavilion was still occupied by the military athletes, who at first refused to evacuate it. For a time a riot seemed imminent; for a large crowd had collected anxious to witness the drill of the Germans. A company of Columbian guards was summoned, but the difficulty was finally adjusted, and the turners, headed by a squad of fencers, 100 strong, entered the arena. Then came a phalanx of color-bearers, and the sturdy column of the regular force, each member of which bore a burnished iron wand. The evolutions which followed constituted a wonderful exhibition of discipline, strength, and agility, the exercises of the turners as a body being supplemented by gymnastic feats, while a club from Davenport, Iowa, gave an exhibition drill in which the participants were equally divided as to sex.

The live-stock arena was the scene of several games of football, contested during the last two months of the Exposition season. Perhaps none excited more general interest than the one between a team of West Point cadets and the Chicago Athletic club, the latter winning a decisive victory. It was asserted by their opponents, probably with truth, that they would have made a much better fight had not the social dissipations in which they indulged while in Chicago unfitted them for such sport.

It may be added that the pavilion was also the scene of a contest not authorized by any one in power, and which constituted one of the few lawless acts of a serious nature perpetrated within the

limits of the Exposition grounds. Just before the close of the English tournament and the opening of the live-stock department, a British bugler and an Irish carriage washer fought a brutal prize-fight, the Englishman worsting his foe and receiving \$500 for his pains. The council of administration attempted to bring home the culpability for apparent negligence or connivance on the part of guards and police; but the result of the investigation was not made public.

In the building mentioned as containing various apparatus for the artificial raising of poultry, was a large exhibit of prepared foods for all kinds of live-stock. One kind is said both to prevent and cure chicken cholera, regulate and stimulate the laying of eggs by hen, turkey, or goose, and to be especially healthful for very young chicks. The exhibitors also manufacture a preparation for horses and cattle. One firm produced a feed made of corn from which the free starch had been extracted, stating that the animals on which it is fed become fat and sleek. Another showed a compound of seeds, roots, and herbs, to mix with the regular feed of cattle, sheep, and hogs, believing that variety of food is good for the animal as for the human race. Ground linseed cake, or linseed meal, was displayed in various forms, by several manufacturers, as a safe and nutritious pabulum for horses and cattle, especially for dairy animals. After the flaxseed is ground and subjected to a high temperature, the oil is extracted by hydraulic pressure, and the residue, or linseed cake, is ground into meal. The difference in the process of manufacturing the oil determines the comparative value of the meal as feed for live-stock, a Cleveland company, for instance, holding that by its method the cake was left with an unusually large percentage of nitrogen, a most necessary element in the food of dairy breeds. But whatever the comparative merits of the different preparations, it is interesting to learn that in the United States, and especially the west, there is an increasing demand for linseed feed. Until recent years the mills of this country turned out about one third of the world's production, nearly all of which was exported to Great Britain. Now about 400,000 tons a year are manufactured in the United States; 550,000 in England, and 200,000 on the continent of Europe.

A bull four years old and a cow of two represented the live-stock of the West Indies. They were as delicate as Jerseys, the bull being mouse-colored and the cow of a rich creamy hue; but their peculiarity was the hump between the shoulders. The specimens



RUSSIAN HORSE

were brought from Trinidad, where they are used for light-draft purposes, being fast and not ungraceful trotters. About a dozen years ago the original stock was imported from Hindostan, and has since been crossed with that of native cattle.

Illinois, Iowa, Vermont, Minnesota, and the Canadian provinces of Ontario and Quebec appropriated money for the expenses of their



DRAFT HORSE

live-stock exhibits. The awards included medals and money from the Exposition authorities and special premiums from associations. Altogether the management had guaranteed a distribution of \$150,000 among all the classes of exhibitors, including several sweepstake prizes for the best herds of cattle. Some of the states also voted large sums to be given to their successful competitors. Missouri showed special liberality in this regard, her state commission appropriating \$20,000 for the purpose. A premium of \$200 was given for each Missouri cow that captured a prize in the dairy breed contest, and half that amount for every one finally chosen by experts to be exhibited. Missouri well sustained her reputation as a leading producer not only of cattle, but of draft and trotting horses, mules, merino sheep, and Berkshire and Poland China swine. On Missouri day, August 30th, there was a special parade of the cattle contributed by that state, attended by Governor Stone and several public officials. In September, in addition to general parades of live-stock, there was a procession of nearly 800 horses, which, on passing the New York state building, was reviewed by Governor Flower, Chauncey M. Depew, and other prominent men from the empire state.

From several states were entered for competition specimens of the Morgan breed of horses, which ante-date the variety known as the standard American trotter. The exhibition of this class was the largest ever made, and to Vermont breeders its success must be largely credited. A liberal sum was appropriated for the purpose, and a commission appointed to select the choicest animals available for exposition. Although their qualities have long been recognized among experts, a determined effort is now apparent, especially in Vermont, to make them a distinctively American breed.

Among the Plymouth Rocks in the poultry show was a four-legged hen which had no competitors. Perhaps of all the breeds none were more admired than the crested chickens of the Polish variety, in one class the head-gear of pure white capping a body of jet black.

The prominence of Canada in the live-stock department was nowhere more evident than in the line of blooded horses. Quebec is especially proud of the pedigree of some of her specimens descended, as they are, from a stud sent there by the king of France, in the seventeenth century, the first of pure Norman breed to be imported into America.

In charge of the horses sent from the stables of the czar was a cavalry officer of high standing, specially appointed for the purpose.

Some of them had pedigrees running back for more than a century, and it is said that there were stallions in the stud which \$100,000 could not buy. The horses were known as Orloff trotters, Orloff half-breed saddle carriers for heavy cavalry service, Orloff-Arab, Russian-Arab, and light Russian draft.

Of the most noted breeds included in the Russian exhibit was that known as Arabian Orloff, and among the most beautiful specimens was Bekbovlat, ridden by Captain Theodore Ismailoff who was in charge of the stud owned by the Grand Duke Dimitry. This famous animal was bred at the Streletsky stud of the government in southern Russia, and was one of the finest horses on exhibition. In striking contrast to the Arabian beauty was the Minnesota Clydesdale, Prince Patrick, who not only captured the sweepstakes prize at the Columbian Exposition, but also took first honors at the leading fairs in Great Britain. Near the Arabian steed and the Clydesdale was placed for purposes of comparison, a typical saddle horse from Kentucky. Thus Russia, Arabia, and America met at the World's Fair.

The German government contributed 60 of the superb coach-horses for which the empire is famous. These are largely imported into France, Italy, England, and the United States, and the demand for them is steadily increasing in our own country. Of the Oldenburg breed are the massively-built animals used for heavy drafting, the Hanoverians and Holsteins being somewhat lighter in weight. The average weight of the entire consignment did not fall far short of 1,600 pounds, a noble animal of the Oldenburg type tipping the scales at 1,700. The German horses are unexcelled for breeding purposes, the laws, which are rigorously enforced, requiring that the pedigree of the studs shall be unquestioned.



AN ARABIAN ORLOFF

It was proposed by the management to hold an extensive kennel exhibit, the entries to close on the 1st of June; but, on account of disagreements among intending exhibitors, the date was postponed and the project finally abandoned.



CHAPTER THE TWENTIETH

ANTHROPOLOGY AND ETHNOLOGY



EAST pretentious among the structures of the Fair in which are housed its main exhibits is the Anthropological building, where is presented a record in miniature of man's condition, progress and achievement, from prehistoric eras to the days in which we live. In this department are several divisions and many sub-divisions, first among which are archaeology and ethnology, with their various branches. In the former section, beginning with the stone age, are shown portions of human skeletons and specimens of handiwork unearthed from geologic strata, from mounds and shell heaps, from caves and burial places, from the ruins of ancient cities and pueblos, and in a word from every portion of the New World where its ancient races have left their impress. From the valleys of the Ohio and Mississippi, and elsewhere to the borders of either ocean, from Mexico and Central and South America have been unearthed, after the lapse of unnumbered aions, their buried implements of stone, iron, or copper, their household utensils and ornaments, and whatever else may serve to throw light on the palæolithic and other prehistoric periods. Some of the exhibits are arranged in geographical groupings, as the models of cliff dwellings from Colorado, New Mexico, and Arizona, and of the sculptured ruins of Copan.

For those who incline to this field of investigation, a section is devoted to physical anthropology. Here, in the skulls, charts, diagrams, and models gathered from many nations, may be compared the past and present types of the human race. There are the skulls of the ancient Greek, Italian,



MONSTERS OF THE ANTEDILUVIAN AGE

German, and Helvetian; there are the skulls of savages and apes; there are casts of faces typical of tribes and nationalities; there are diagrams showing the comparative stature and anatomical measurement of men and women in various countries, with photographs, statues, and other appliances for a thorough study of this important branch of science. Elsewhere by similar agencies are illustrated the functions and activities of the brain and the organs of sense, whether in normal or in unhealthy condition. In the case of children there are also apparatus for an experimental study of mental phenomena, the subjects being chosen from those who would submit themselves to certain tests while visiting this department of the Fair.

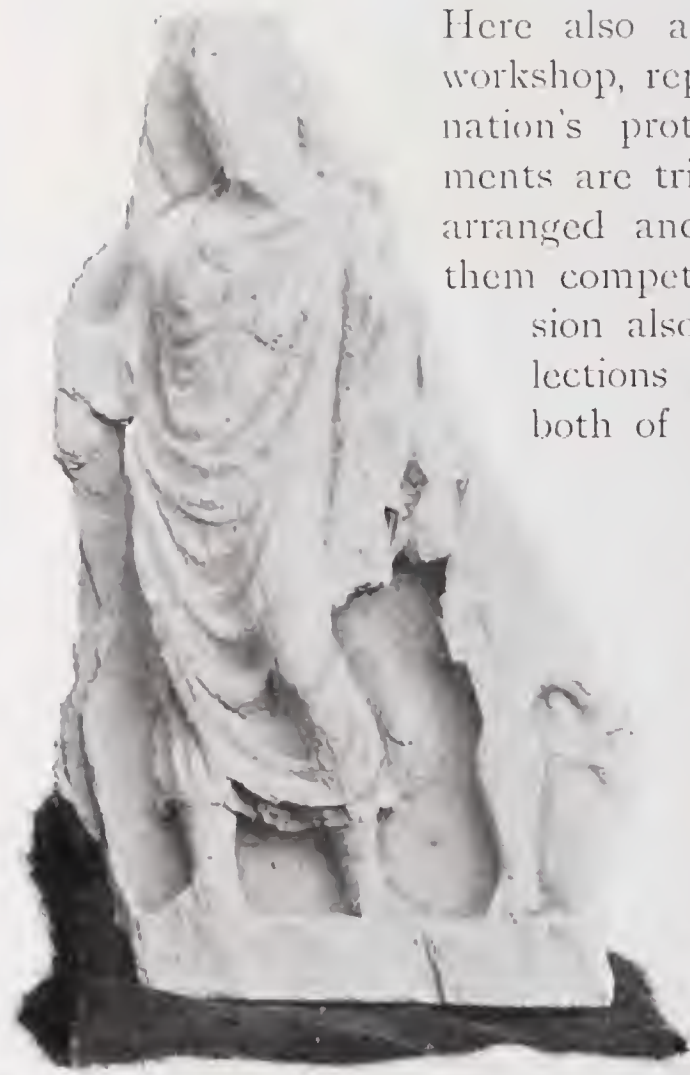
A special and most interesting section has for its subjects primitive religions, folk-lore, and games, the last being grouped together so as to form a comparative study. But it is on the exhibits relating to the



INTERIOR VIEW OF THE ANTHROPOLOGICAL BUILDING

condition and progress of man that the interest mainly centres, and especially on such as pertain to modern man; for from the relics of the buried past, whose history at best is largely diluted with speculation, we turn with a sense of relief to more practical evidences of his achievements as contained in written or printed page. Thus it has been the prime object of the ethnological display to afford an opportunity for the study of national types, not only from a scientific point of view, but as far as possible through living specimens. To this end a strong background has been obtained by placing before the spectator the representatives of races existing on this continent in the days of the Columbian era. Then are illustrated special epochs and events, with portraits and busts of those of whose lives and achievements our history largely consists, but without allusion to the annals of the civil war, a theme entirely out of place in an exposition devoted to the arts of peace.

But the exhibits of this department, and especially its historical exhibits, are not restricted to the Anthropological building. In the convent of La Rabida is a collection relating especially to the Columbian epoch, under the special charge of William E. Curtis, of the Latin-American bureau. In the Government edifice is a large gallery of paintings, photographs, and other illustrations pertaining to the Latin-American republics. In a model Indian school are the representatives of many native tribes, gathered almost from the shores of the Arctic ocean to the gulf of Mexico. Here is the civilized Indian at his task of making blankets, baskets, pottery, or at the more welcome task of eating and drinking, or playing with his children and his dogs.



A GRECIAN FRAGMENT

Here also are specimens from farm and workshop, representing the industries of the nation's protégés, while in other departments are tribal exhibits, each one carefully arranged and credited, and not a few of them competing for awards. To this division also belong in part the state collections and the Midway plaisance, in both of which are ethnological features.

Additional attractions in this department are exhibits in natural history and taxidermy from several of the states, from the Canadian province of Ontario, and from Brazil, including valuable collections from Ward's Natural Science establishment at Rochester and from the Agassiz association at St Louis. These are not restricted to the hall of Anthropology, the Kansas state building, for instance, containing the best

specimens of taxidermy displayed in the Exposition and one of the best in the world.

The general plan, however, is to illustrate in a series of object lessons the development of various phases and adjuncts of civilization, as architecture, household conveniences, appliances and methods for the saving of life and labor, for the discipline and reform of criminals, for the cure of the sick, and the relief of those who are in need. Sanitation and hygiene, charities and corrections, properly belonging to the department of Liberal Arts, find expression in the Anthropological building. In apparatus, models, plans, photographs, and literature are shown the progress and condition of sanitary science as applied to dwellings, workshops, stores, and public buildings. Here are displayed the best systems of heating, ventilation, and drainage; the precautions used to prevent and check infectious diseases, and to minimize the danger to health incidental to certain trades. Another branch is athletic training in various forms, and still another is the adulteration of food, with the proper means for its detection.

In connection with charities, asylums and homes for all classes of the unfortunate or infirm are compared in their several sections.

Over the main northern entrance of the Anthropological building, in the southeastern extremity of the grounds, is the inscription, "Man and His Works," thus briefly and aptly explaining the purposes of the display. A floor space of more

than 100,000 square feet is mainly occupied by the archaeological and ethnological exhibits of foreign countries and of state boards and individuals, together with the collections gathered from various parts of North and South America by a corps of



CARVING FROM CENTRAL AMERICA



CORNER OF MEXICAN SECTION



ESKIMO GROUP



VIEW FROM THE WOODED ISLAND



ARCHAEOLOGY AND ETHNOLOGY

the most famous of Grecian sculptures and statuary, exhumed from the mausoleums and ruins of Mycenæ and Delos, of Bœotia, Attica, and Thessaly. Among them are statues of Diana, Apollo, and Victory, with allegorical groups representing various subjects. Of special interest are the replicas of two statuettes of Minerva, executed by Phidias in ivory and gold, with figures of Mercury, one of which is a cast of what is said to be the only authenticated work from the hand of Praxiteles. Here also are represented colossal statues or fragments of Arcadian origin, once forming a portion of a group in the temple of Proserpine. Among sculptures of the fifth and fourth centuries of the pre-Christian era are



ANCIENT PERUVIAN BURIAL GROUND



ESKIMO VILLAGE

assistants under the direction of F. W. Putnam, as chief of this department. In the northern portion some 30,000 square feet are set apart for the bureaus of hygiene and sanitation, of charities and correction.

Passing through the northern portal, the visitor observes a few small collections illustrating certain points in the antiquities and ancient arts of Assyria, Egypt, and Rome; then proceeding down the main aisle, he finds at its central point the government exhibits of Greece, supplemented by contributions from the Chicago museum of art. These are for the most part reproductions of

bas-reliefs from the acropolis and figures from Arcadian and Olympian temples; but most ancient of all, and perhaps the oldest specimen extant, is a relief from the Lion gate at Mycenæ. Belonging to later periods are the colossal statues of Justice and Neptune, from originals discovered in the island of Melos. Finally there are busts of the emperor Hadrian and his favorite, Antinous, with figures or heads of Hermes and Pan, of Minerva and Medusa, of Athenian youths and dancing women.

Beyond the Grecian section are other collections relating to European archæology, including those from the government museum at Vienna. A Moravian contributor shows the skull and bones of a monster bear, a cave-

dweller of prehistoric times. In this vicinity is also a valuable display of Egyptian antiquities from Albany, with one from the imperial museum of Japan, containing relics of the earlier ages of its island empire.

Mexico occupies a large area adjacent to that of Japan, reproducing not only her ancient ruins but the historic structures described by Spanish chroniclers as existing at the time of the conquest. From the Federal district comes a model of ancient Mexico, with specimens of Aztec furniture, and from various states, from the scientific institute at Toluca, from the Mexican Central railway, and many private exhibitors are other contributions which fill this large and well arranged section. Models of rural homes familiar to travellers in that country are side by side with musical instruments, household utensils, pipes, cloaks made of bark, and other apparel worn by native Indians. Aztec lances, battle-axes, shields, and war drums are massed in one corner, and not far away is a group of stone heads and idols, with ancient coins, copies of antique manuscripts, water color paintings of antiquities, human skulls and jawbones, casts of inscriptions on stone, and models,



MISCELLANEOUS SPECIMENS

photographs, albums, and books illustrating past and present types of Mexico's native races. The Mexican Central sends an interesting collection of coins, pieces of obsidian, and plaster casts of Aztec calendars, and elsewhere are charts showing the ancient system of recording time, with painted shields of Aztec warriors and a copy of Mexico's earliest map.

On the opposite side of the main aisle Ohio, Indiana, Missouri, Wisconsin, Colorado, and the Canadian province of Ontario, most of the former through their historical societies, and the latter as a government display, have large collections of pottery, implements, and weapons pertaining to prehistoric tribes. These are supplemented by private contributions, forming together a most interesting study in archaeology. Colorado, for instance, thus describes in part the history of her ancient cliff dwellers, and so with Arizona, New Mexico, and Utah. There are pottery and stone implements from the great shell heaps of Florida and Maine, while Michigan, Illinois, and Missouri contribute from their valleys and ancient village sites utensils not only of stone but of copper. Other relics are from the mounds of Tennessee, Kentucky, and Arkansas, from Connecticut, and especially from the valley of the Delaware, whence the collection was made by an agent of the Anthropological department. Several experts were also despatched to the valleys of the two Miamis, the Muskingum, Scioto, and other tributaries of the Ohio, around which cluster so many of the mysterious mounds supposed to

be remnants of fortresses and burial grounds, among which are records of animal symbols, or totems, adopted by family or tribe. The famous Serpent mound, over 1,200 feet in length, is here in miniature relief, displaying what archaeologists believe to be an egg, symbolic of the creation of the world. Reconstructed on a small scale are also the Turner and Hopewell groups of mounds, the latter, more than a score in number, built on a terrace, with another elevated surface bordering the creek near

by, and a third not far away, where careful exploration disclosed many pieces of copper, fashioned into various geometric figures, into ornaments, and forms of bird, fish, and beast. Implements of copper, mysterious crosses of the same metal, shells, bears' claws, sharks' teeth, mica, carved bone ornaments, spear and arrow heads, and thousands of flint chippings are among the articles taken from the Hopewell farm and exhibited in this department. In connection with illustrations of prehistoric life pertaining to Ohio may also be mentioned the survey maps of Fort Ancient, and those of the Marietta earthworks and other well known localities.

After Ohio, the state of Wisconsin, through its historical society, presents the most interesting study for those who would further investigate the much disputed question of the mound builders. Here the mounds are chiefly located in the valleys of the Fox, the Wisconsin, and other prominent waterways, clustering most thickly around the larger cities of the present day. In other sections are numerous heaps of

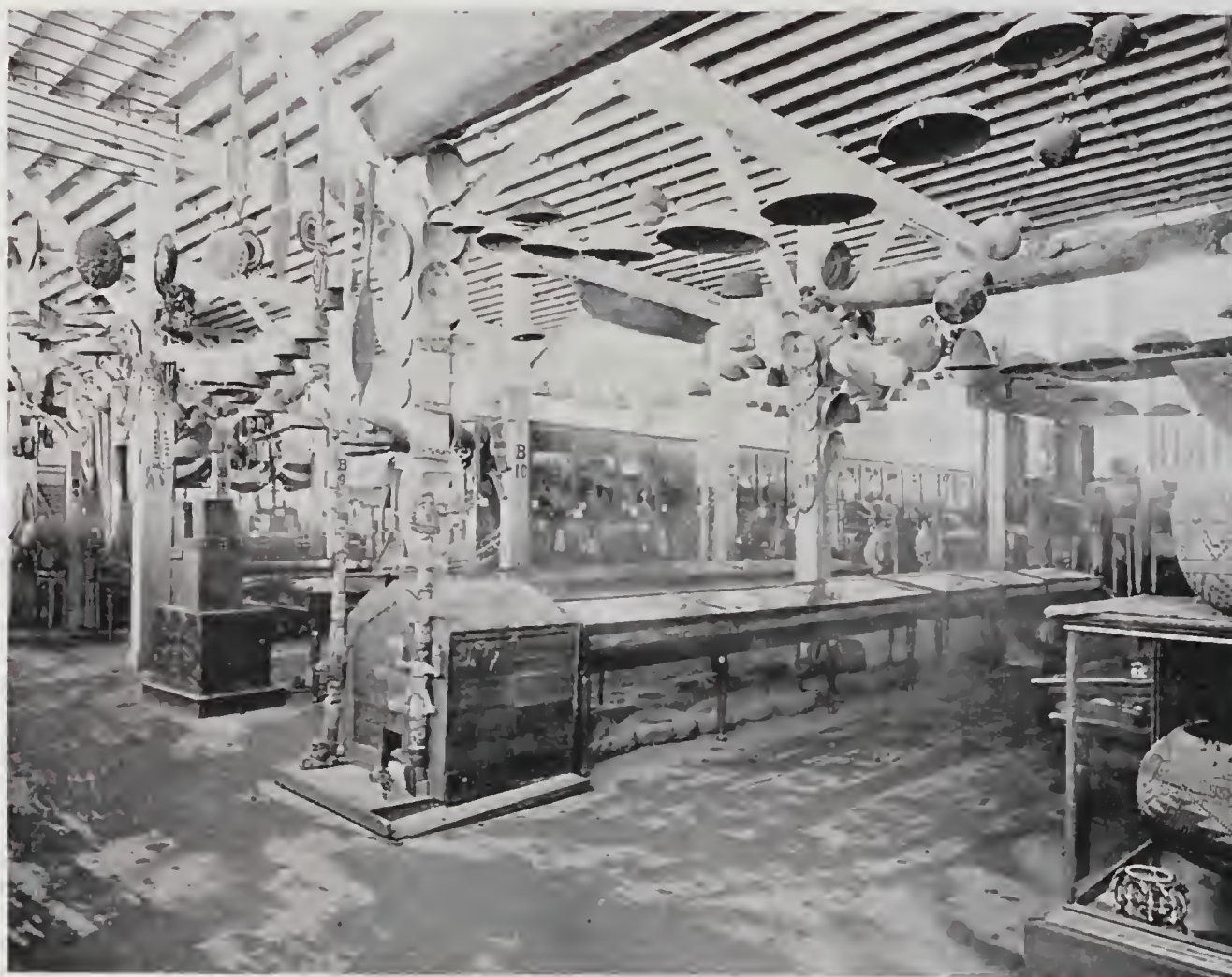


A NATIVE HUT, BRITISH GUIANA

earth such as have already been described; but while these forms are also very numerous in Wisconsin, the so-called effigy mounds, in which is depicted the human figure, are believed to be peculiar to that state. Therefore it is that the tablets in this collection, showing the model and outlines of a group of effigy mounds, are considered of special value by the department.

From the neighboring state of Minnesota has been forwarded by a private contributor a section of her pipestone quarries, long considered the main source of supply for the making of the calumet, or pipe of peace, with which is connected much of the semi-religious aspect in the Indian mythology of the west. Among private exhibits relating to archaeology mention should also be made of a collection from Frank G. Logan, of Chicago, purchased from H. N. Rust, of Pasadena, whose days have been passed in archaeological researches extending from New Hampshire to California. There are in all some 3,000 specimens, among them the flat stones worn by prehistoric man into cup-like grooves, while crushing bones or grain, with stone hammers, axes, and rude implements for tilling the soil. From California the relics include a portable mortar, the upper part of which is of wicker work and the bottom, a stone; cooking vessels of stone and clay; stone lamps, with pieces of bark for wicks; stone rings utilized as sinkers for fish nets, as mallet heads, or as weapons; stone tubes employed by medicine men for cupping processes, and pieces of obsidian from the Klamath Indians and the ancient Aztecs, by the former used as ornaments and indications of rank, and by the priests of the latter for killing their sacrificial victims. In the Aztec groups are also polished stone work and neatly fashioned urns in which were placed the ashes of the dead.

In other sections, separated by the width of the hall, are interesting and valuable collections gathered by the agents of the department from Honduras and Yucatan, from Colombia, Bolivia, Peru, and other points



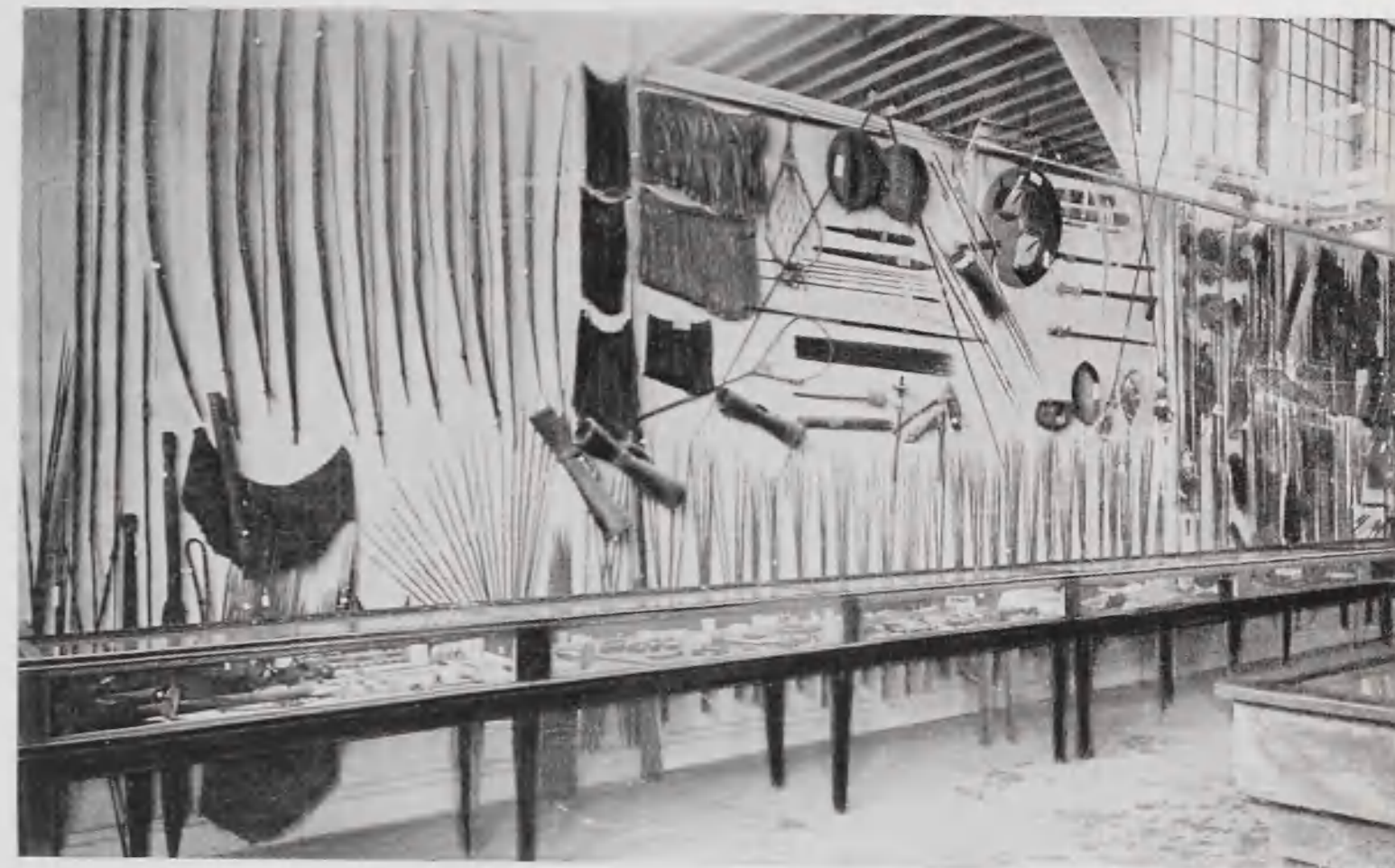
A PRIVATE ETHNOLOGICAL EXHIBIT

in South America and the West Indies. As reproductions of the famous sculptures of Central America, the French minister of public instruction has furnished imposing casts, covered with strange figures and hieroglyphics, from moulds taken by Désire Charnay. Other contributions are from the Berlin museum, the government of Honduras, and the Peabody museum of American archæology. For those who care not for these strange weird forms and faces, there is a gallery of forty large photographs, representing the exhibits of Great Britain and the achievements of one of her explorers, whose views were taken from the ancient structures of Guatemala, Honduras, Chiapas, and Yucatan.

More imposing and complete than anything within the building, however, are the reproductions of the Yucatan ruins displayed, as I have said, outside its walls. The explorations were made by E. H. Thompson,

United States consul and an agent of the Exposition, his moulds consisting of the portal from the central structure of the group of ruins at Labna, the façade of the Serpent house, and three sections of the house of Nuns, the last from the ruins of Uxmal.

Returning to the Anthropological building, its most uncanny collection is from the ancient land of Peru, whence is a substantial reproduction of a burying ground at Ancon. There are ridges of gravel and sandy soil, with mummies in all positions, and skulls, bones, and cloth interspersed. The preservation of the bodies is largely due to the almost total absence of rain in the locality



PRIMITIVE WEAPONS AND IMPLEMENTS

whence they were taken, and to the saltpetre and other preservative elements contained in the soil. There are more than 100 bodies, including those of many personages of note, one with colored standards and war club beside him, others swathed in richly colored blankets or cotton cloth, and all with jars of provisions beside them, so that they hunger not on their way to the hereafter. Some of the bodies are tattooed, and adorned with beads and copper ear rings, while on tablets fashioned of cloth, stretched upon frames of wood and painted with figures and characters, are described the virtues of the deceased. The latter, together with the clothing and other articles taken from the graves, are wonderfully preserved, even to parrots' feathers found on the heads of warriors. As Ancon was a fishing town, many nets were unearthed from its sepulchres, and these are almost intact, as are the baskets of woven fibre representing the industries of women.

The agent who explored this famous necropolis of Peru, also visited



REPRODUCTION OF YUCATAN RUINS



portions of Chile, Bolivia, and Ecuador, in the interests of American archaeology. It was from the island of La Plata, off the coast of Ecuador, that he collected the rarest of the relics aside from those gathered from the burial ground of Ancon. The former was virgin soil for the archaeologist, and with the coöperation of the government, he was enabled to exhume not only the bodies of the dead, but finely wrought pottery and beautifully finished cups, jewelry, and idols of gold. Slabs of the precious metal were also discovered, from which these works of art were fashioned. A large area was covered with a stratum of ashes several feet in thickness, which appeared to separate other relics from those of finer workmanship. The investigators concluded that they had found a large cemetery where the dead were burned, and that the stratum was the dividing line either between two peoples or two grades of civilization, the utensils and ornaments plainly indicating different degrees of skill and culture. In this connection may also be mentioned the large collection of pottery, wooden vessels, ornaments, implements, and various articles of gold, silver, copper, and stone, gathered near the city of Cuzco, Peru, and relating to periods when this locality was the centre of governmental and priestly power. Here was the great Peruvian temple of the Sun, whose ruins are still imposing.

In another portion of the hall, near the casts of Central American sculpture, is a group of picturesque exhibits from Brazil, British Guiana, Costa Rica, and Paraguay. In character they partake both of the archaeological and ethnological. For example, in the Brazilian section the national museum and the museum of Para contribute ancient pottery; urns containing the ashes of the dead; carved images of hideous aspect representing the heathen gods before the advent of Christianity; huge clubs, bows and arrows, blow-guns, and other weapons; painted images of religious import, and household utensils made by Indian tribes of the present day. Here also is a number of pictures, a large oil portrait representing a South American native, his black body gleaming like ebony, his black hair adorned with bright-colored feathers, and his neck encircled with a necklace of teeth taken from the jaws of wild animals, while from his feathered breech-cloth hangs a quiver of arrows, the long bow which he seems able to wield to good effect lying by his side. From Costa Rica come pottery, implements, ornaments, utensils, and weapons gathered from ancient graves, large maps hung upon the walls of her section indicating the most important districts from an archaeological point of view, and large paintings illustrating the appearance and customs of the natives.

But one of the most complete collections of curios relating to the South American Indian of to-day is

that which resulted from the expedition of Lieutenant Roger Welles to the upper waters of the Orinoco river. The lieutenant acted as an agent of the department, and his display consists of reed blow-guns, some of them ten feet in length; spears, large bows, and poisoned arrows with fish-bone tips; reeds bound together to form a single instrument; glazed pottery simply but tastefully ornamented; tinder boxes made of bamboo or bone; baskets, combs, boards into which flints are set for grating cassava roots, and hammocks made of the fibre of a native palm; implements used in extracting india rubber; feather head-dresses and costumes; strings of monkeys' teeth, and other articles illustrating the domestic, industrial, and warlike phases of aboriginal life. Finally there is a number of articles from the Caribs of the West Indies, the fiercest of the tribes with which Columbus had to deal.



MODEL HOUSE FOR NEW YORK WORKINGMAN

Among the ancient enemies of the Caribs, it is said that the Arawaks were the most powerful, often repelling the incursions of the former upon the mainland. One of the most notable of the ethnological specimens



HYGIENIC APPARATUS

is a full-blooded native of the latter tribe, brought from his forest home to assist the British commissioner in his arrangement of the Guiana section. This exhibit, one of the most picturesque in the department, is grouped in and around two huts, one such as serves for habitation the Indians of the forest, and the other those of the coast. There are hammocks of various kinds, plain and ornamented; benches of wood and tortoise-shell; tinder boxes, and the more primitive fire sticks. Elsewhere are tobacco leaves; cigarette paper made of vegetable fibre, and miscellaneous leaves and fibres, used for thatching, for twine and ropes. There are also fibres and ropes for making hammocks, and spindles and frames employed in their manufacture. In the



MAMMOTH RELICS



FOOT PRINTS AND TRACES IN GEOLOGICAL STRATUM, NEVADA

line of dress and ornaments are various styles of aprons worn by the women, fashioned of bark, cotton, and beads, with cotton anklets and waist belts, plain and adorned with fringes or pendants. Teeth of jaguar and peccary are made into necklaces, and there is nose jewelry of silver and tin. Feathers of brilliant hue are used for head-dresses or girdles for the arms and shoulders; a fish spine serves as a tattooing implement, and there are dyes of red, yellow, and white for staining the face and body.

Native warrior and sportsman are represented by war-clubs, bows and arrows, blow-pipes, fish-traps and nets, and hunting bags of skin and wicker work. The arrows are of many kinds; those for killing birds, with bamboo points; for stunning them with blunt heads; for shooting fish, metal heads; for large game, metal spear heads; for turtles, separable metal heads; and poisoned arrows for game, with bamboo point and cap. Domestic life is represented in a collection of jars, jugs, gourds, and baskets; corn mortars and pestles and sugar cane crushers; graters, pressers, and baskets for the preparation of cassava; hollowed trunks for festive drinks with paddles for stirring them, and mats for protection against stinging ants and the coercion of unruly children.



PENNSYLVANIA STATE COLLECTION

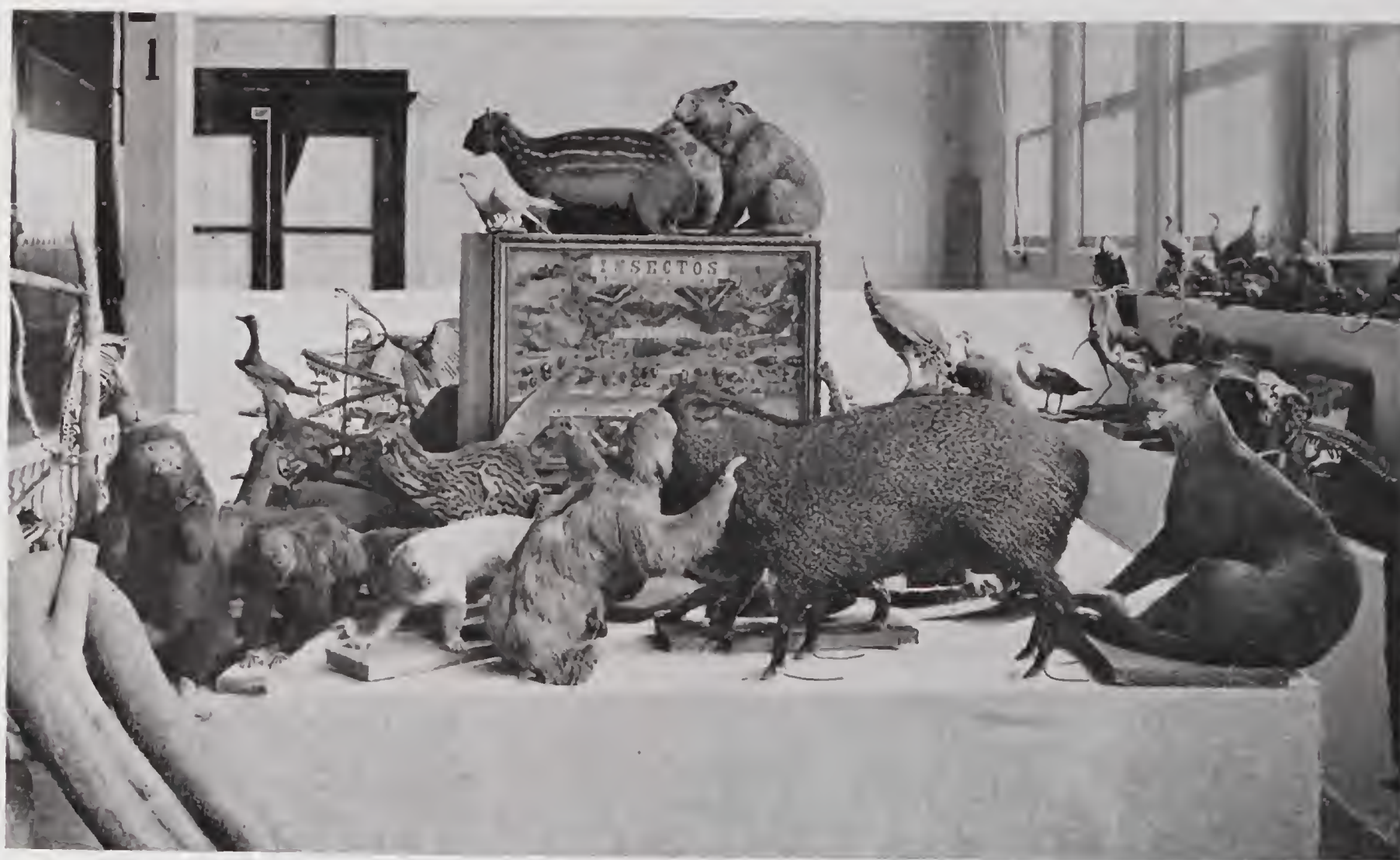
Wrestling shields, dancing sticks, rattles, trumpets, flutes, an Æolian harp made from the stalk of a palm, and a head-dress of leaves point to sport, music, and the dance. The environment of the native tribes is further illustrated by cabinets of birds, fishes, and animals used for food, and a collection of photographs showing the country which they inhabit.

Thus it will be seen that the native races, both past and present, of what is known as Latin-America are fully represented in the Anthropological department. A collection yet to be mentioned is that of Emil Hassler, the Paraguayan commissioner, one pertaining

to the customs not only of the native tribes of his own country, but of more than forty others, scattered over the central portions of South America. This collection, the result of many years of labor, was the only

exhibit from South American countries for which a gold medal was awarded at the Paris exposition of 1889. The tribes from which it was gathered were sparsely scattered over the territory occupied by the Tupi-Guaranis family during the Jesuit occupation, and here is nothing in the way of idols, all traces of idol worship being destroyed during the seventeenth century. The collection consists for the most part of weapons, utensils, and articles of rude manufacture.

Among the first are spears whose points are made of wood, stone, bone, and iron; stone axes, and bows from which stones instead of arrows are shot. There are also primitive machines for spinning cotton threads, and a shawl of cotton, made entirely by hand; shells, teeth, hammocks, straw hats, pottery, boat and oars, fishing implements, bone



ANIMALS AND BIRDS OF BRAZIL

knives, lip perforators, wooden ear-plugs and ornaments for the head, which are composed mainly of feathers.

In the western quarter of the Anthropological building a considerable space is devoted to the large and interesting government exhibit from New South Wales, and to the collections from New Zealand, New Caledonia, and other islands of the South Pacific. They are mainly composed of weapons, implements, ornaments, and costumes, arranged in striking designs upon the walls of the various sections, supplemented by hideous idols



MAMMALS OF THE PINE TREE STATE

from the New Hebrides and Solomon groups, and by paintings of typical natives, some of them hardly less repulsive. There is, however, a reverse side of aboriginal life, furnished chiefly by the board for the protection of the aborigines of New South Wales, whose headquarters are at Sydney. From the children of the school established by this board are specimens of handwriting and needle-work, with drawings executed by a famous chief of the Ulladulla tribe, dealing principally with hunting and fishing scenes. The assortment of Polynesian curios is further enriched by contributions from the royal museum of Vienna, and by those of private individuals, among which is one from New Caledonia, while from New Zealand are implements, ornaments, and cloth of Maori manufacture.

In this vicinity also are the fetiches of central and western Africa, with the musical instruments, household utensils, ornaments, and weapons peculiar to the dark continent. On one of the walls is a group of weapons from the basin of the Congo, and the warlike Zulus furnish an interesting collection of arms, sceptres, and royal insignia, with ornaments of silver, ivory, and horn. Not far away is a group of Chinese idols and other objects referring to oriental religions, with a special display illustrative of the life and customs of the Chinese in the United States. Then come private

exhibits, including baskets, bead-work, ornaments, and costumes of North American Indians. For those who wish further to investigate this subject there is a gallery of pictures, mainly by George Catlin, relating to aboriginal life in America, and showing not only types of leading tribes but chiefs prominent in the history of



SECTION OF THE ETHNOLOGICAL DEPARTMENT

Indian warfare. The Wisconsin Historical society sends an interesting exhibit of garments, utensils, and other articles bearing upon the customs of such noted tribes as the Chippewas and Winnebagoes, while a Washington contributor, who for a decade has been investigating the subject of Indian music among the tribes of the west, displays the results of her work, especially among the Nez Percés, Omahas, and Winnebagoes.

In this exposition of the life of North American Indians, however, the tribes of the far northwest furnish most of the ethnological material. Alaska and British Columbia are especially rich in this respect, and to these regions the department sent many agents, as well as to Labrador, Greenland, and other habitats of the Eskimos. Thus may be gleaned something of the peculiarities of a race which seems to be a connecting link

between the old world and the new. From Alaska are pipes and other articles carved in wood and ivory, with masks and head-gear such as are used by the priests, or shamans of Siberia. There are also carved bowls; wooden chests and boxes inlaid with ivory, bone, and shell; horn ladles, dishes, and spoons; fish-knives and curious hooks; fire sticks and tinder boxes, surgical knives and a multitude of other articles among which are pictures of considerable merit. But perhaps the most interesting of all is the model of the Indian village of Skidegate, on one of the Queen Charlotte islands, off the coast of British Columbia. Worthy of special note



ALONG THE BEACH NEAR THE FRENCH GOVERNMENT BUILDING

are the carved posts, fashioned by the Haidas into shapes of beast, bird, and man, representing either some symbol which has been adopted or some myth handed down through the ages. Within the building both totem poles and structures are much reduced in size; but on the shores of the pond near by are exact reproductions of the originals.

Extending across the southern portion of the building is a double row of cases which mark the dividing line between the departments already described and those that relate to sanitary and reformatory measures. Grouped among the latter is material illustrative of the folk-lore, traditions, and customs of many races; but here the field is so vast that the collection has been practically restricted to the subject of games, and even in this regard it is remarkable how much mankind has in common. The basis of the collection was formed in the museum of archæology in the university of Pennsylvania, and this has been supplemented by exhibits from individuals and the leading manufacturers of appliances for games in the United States.

As the games are classified and arranged for comparative study, the puzzles and simple apparatus for children commence the series. Ancient puzzles from East India and China are seen in many familiar forms, those from the latter usually made of wood, bone, or ivory. Simpler still are the counting-out rhymes of children, contained in book form and common to many countries. Here the boy with his first top, which represents to him a new form of plaything, finds in one of these cases a wooden object not unlike his own treasure, discovered in Egypt and dating about 2,800 B.C. From the burial grounds of Ancon, Peru, similar objects were unearthed. The Sioux of North America made for their children, in primitive times, balls of stone and baked clay, which were spun on the ice like whip tops. Later, they fashioned them of wood, adding pegs of brass. Pop-guns and squirt-guns, it is found, have amused the children of the native tribes of East India and the aborigines of North and South America, while jackstraws, under different names, have been used in China, England, and France since time immemorial.

Games of ball were common in Egypt long before the reign of the Pharaohs, the most ancient specimens of implements being a stick and small block of wood which served for this purpose more than 4,600 years ago. They were also

a favorite pastime in Turkey, in Asia, Persia, India, China, and Japan, spreading thence to Europe and the western hemisphere. All the appliances are here displayed, together with the wicker baskets and flat bat used in Spanish ball games, while a Chicago house has an exhibit of the articles employed in games of cricket, base-ball, foot-ball, golf, polo, la crosse, lawn-tennis, racket, and shuttlecock, with Japanese and Chinese forms of the last-named. Ring games of various kinds are illustrated, and a collection of large Burmese seeds and the knuckle bones of Turkish sheep, weighted with lead, are among primitive



PENNSYLVANIA EXHIBIT



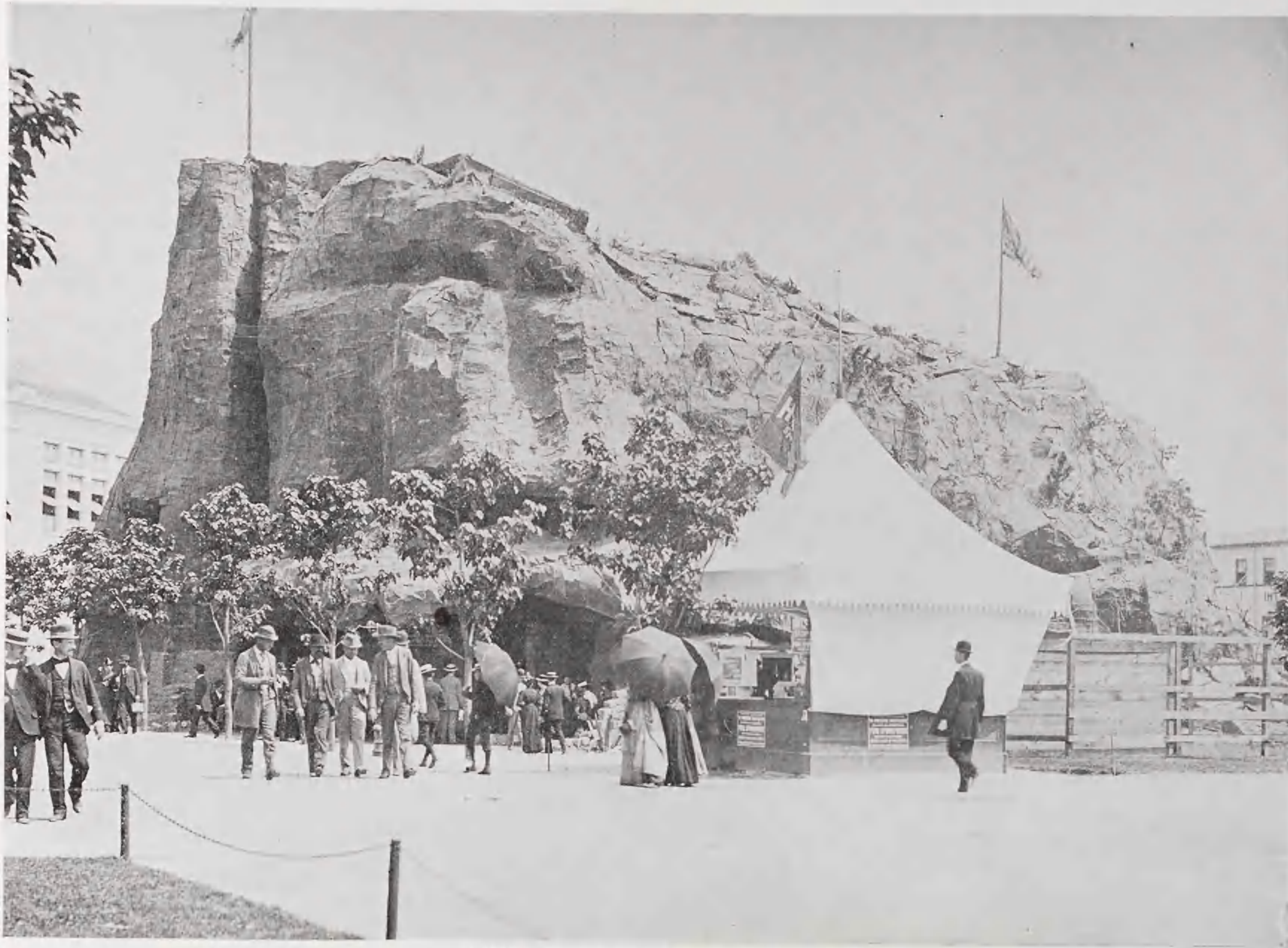
MODEL OF OHIO SERPENT MOUND

forms of marble playing, other implements being shown as in use to-day. To illustrate the comparatively modern games of bowls, billiards, and croquet, a Chicago company shows apparatus and miniature models of



VIEW FROM TRANSPORTATION BUILDING, LOOKING NORTH

remarkable beauty and finish, while another interesting collection is from the Chicago curling club. Adjoining is a case in which are gathered from China, Korea, Japan, Siam, Egypt, Morocco, Peru, and New Mexico, the boards and pieces for games resembling chess and draughts. The boards used in the Japanese and Peruvian games of fox and geese are almost identical, and as these were unknown in either country until the sixteenth



HAUNTS OF THE CLIFF DWELLERS AS SEEN AT THE FAIR

century, it is inferred that they were of Spanish origin. Perhaps the most interesting form among this class of games is furnished by the Zuñi Indians of New Mexico, the board upon which it is played being divided into 144 squares, each of which is crossed by two intersecting diagonal lines. Says Stewart Culin, in charge of the folk-lore department: "The moves are made one square at a time along these diagonal lines, the pieces being placed at the angles of the squares. Two or four persons play. They each start with six men, and their object is to get their men across to the other side and occupy their opponent's places, capturing as many of his pieces as possible by the way. A piece is taken by getting it between two others, as in the modern Egyptian game of seega, and the first piece thus taken may be replaced by an extra one belonging to the player who makes the capture, which may move on the straight as well as the diagonal lines and is called



FRAGMENT SHOWING THE FEAST OF BUDDHA



BUDDHA'S WEBBED HAND

the priest of the bow. This game, which is arranged and is exhibited by Frank Hamilton Cushing, is called *A-roi-thlak-na-kwe*, which he translates as 'stone warriors.' Edward Falkener in his work entitled, *Games Ancient and Oriental*, which he lent for exhibition here, has published a restoration of the ancient Egyptian game of

senat from fragments of Egyptian boards which have come down from 1600 B.C. The game as thus restored is in some respects similar to the Zuni game, the men being taken as in seega by getting them between two others. The Zuni game, however, may be regarded as in advance of any other board game even of our own civilization, until we come to the true game of chess.



INDIANS OF BRITISH COLUMBIA

Chess stands alone among games. We do not find the links that connect it with lower forms of board games, and the Indian game from which our own is derived, almost without change, is the source from which the many variants of the chess game doubtless originated. Several of these offspring of the Indian chess are shown in this case, including those of Burma, Siam, the Malay peninsula, China, and Japan. A Moorish board is exhibited with them, and European chessmen and boards follow. A finely carved ivory chess set represents the pieces that are made for export by the Chinese at Canton. Draughts, which in the opinion of Edward B. Tylor may be regarded as a modern and

simplified form of chess, now follow, and here are shown two sets of interesting German draughts-men of the eighteenth century."

Games of chance, in which dice, dominoes, and cards, or their equivalents, are variously employed, are included in a division which is profusely illustrated. The American Indians almost throughout the entire continent played a game with marked plum-stones, bones, or wooden pieces, a small basket taking the place of the dice-box. In the East Indies cowries are used; in Peru, knuckle bones, and in China the roots of the bamboo. Specimens of these and other primitive implements are displayed, among them the bones in their natural state from the legs of the sheep, used by the Syrians in their games of chance. The oldest die in the collection is formed of clay and bears date 600 B.C. It was discovered among the effects of the Greek colony of Naucratis in Egypt.

The game of dice, it is said, was carried from India into China, where the twenty-one possible throws with two pieces each received a name. To this day it still remains the principal game of its class in the



LONG CABIN OF THE SIX NATIONS

flowery kingdom, where in the twelfth century dominoes were invented and cards evolved from dominoes and chess. All this is clearly illustrated, as also is the origin of backgammon from the game of "Twelve Lines" played in the time of the Roman empire and during the middle ages. From Damascus is a pearl-inlaid backgammon board, and a similar article is displayed by the Siamese commission. In China and Japan, however,

backgammon is not usually played as in Europe and America. In one of the Chinese games here exhibited is a large paper chart upon which are printed the titles of various officials, and the players are advanced or degraded in rank according to the throws of their four cubical dice.

Besides the Chinese, there are several packs of East Indian cards, circular in form, with flower and proverb cards from Japan, and some of the earliest specimens known to Europe, including those which first



QUARTERS OF THE NAVAJOS

appeared in Venice. It is generally conceded that playing cards were invented in China during the twelfth century; and among the most interesting of the collections is the one exhibited by W. H. Wilkinson, consul at Swatow, consisting of a series of dice, dominoes, and cards gathered from the principal cities of the empire. From this it may be seen how very similar are the games of cards as played in China and Europe. The suit marks in the Italian cards consist of money, cups, swords, and clubs, and during the early period of their manufacture the printing was performed with stencils. Side by side are the cards that were used in Florence,



BIRCH BARK HUTS OF PENOBSCOT INDIANS

Milan, and Naples, with the stencils, brush, and unfinished card sheets from a Florentine maker who still adopts this ancient mode of manufacture. In the old German packs the suits are hearts, bells, leaves, and acorns, and in the court cards the queen is omitted. Beautiful specimens of modern make are also exhibited,

which show the French suit marks of hearts, diamonds, spades, and clubs, now generally adopted. Other European varieties are here, as well as various Spanish and Mexican packs, some of the latter resembling those of Italian make.



CLASS OF INDIANS IN FRONT OF SCHOOL

through no fault of the department. In the section containing gymnastic and hygienic supplies a Providence company has in its spacious pavilion every form of appliance; a St Louis house exhibits apparatus for home training, and a Michigan sanitarium displays models of its buildings and the articles therein contained, especially as to the styles of dress considered most healthful for women and best adapted to their physical development.

In the section devoted to physical development, training, and condition are numerous appliances, for the most part of modern fashion. Beginning with the nursery and its accessories, they include such as pertain to gymnasia, to wrestling, rowing, hunting, skating, climbing, and acrobatic and other exercises, with special apparatus for the drill and training of pupils in public schools and higher institutions of learning.

In the hygienic and in other departments there are various appliances for analyzing food and water and for sterilizing meat extracts and infant foods, thus removing all disease germs. Many of these are from German inventors and sanitarians, while state boards of health show their interest in this line of investigation by contributions of hygienic literature, with maps and diagrams, and of appliances used in the detection of impurities and adulterations. For example, Pennsylvania displays a bacteriological outfit, including apparatus for collecting specimens of drinking water from hydrants. From New Jersey are specimens of adulterated foods and drugs, while Massachusetts illustrates modern methods of analyzing them. Women have also many practical suggestions to offer in this connection,

As already stated, the bureaus of charities and corrections and of hygiene and sanitation, included in the department of Liberal Arts, were installed in the Anthropological building, this being due to the urgent demand for space by the educational institutions of the United States and foreign countries. The aim of the latter bureau was to demonstrate, as far as possible, the condition of sanitary science at the present day, and especially to show that it has not received the attention and support which its importance demands. Notices were sent to universities and colleges, boards of health, sanitary and hygienic societies, physicians, manufacturers of gymnastic and hygienic supplies, and the public generally, soliciting contributions to the several groups into which the exhibits were to be divided. The result was a most creditable display, not least among the purposes of which was to call the attention of municipal authorities to the lax sanitary systems prevailing in their midst. If in this it did not altogether succeed, that was



WILLIAM E. CURTIS



THE ORIGINAL LA RABIDA IN SPAIN

the Ladies' Health Protective association of New York, for instance, furnishing models and photographs of abattoirs and dust carts. The empire state is further represented outside the building in a frame structure and tent, the former containing the exhibits of cooking schools, with a model kitchen and a lecture room where also are held discussions and practical demonstrations having a special bearing on the preparation of foods for invalids and children. Within the tent is a complete outfit of camp utensils, with health appliances for out-

door life. The exhibit of the cooking schools is under the management of Mrs. J. S. T. Stranahan, Juliet Corson, the founder of the first institutions of this character in the United States, acting as the leader of the classes.

Before taking leave of this subject, it may also be stated that in the Anthropological building is a large collection of apparatus for cleansing water—not only so-called germ-proof filters, but appliances for purifying both water and meat by electricity. For those who desire still further to pursue their investigations, there is an abundance of literature devoted to the subject, with dietaries especially designed for the army, the navy, and the prison, while in models, charts, and transparencies are shown



INTERIOR VIEW OF LA RABIDA

the effects of disease caused by impure food and water, with the appearance of the special germs which the vitiated blood is unable to absorb or reject.

A division of the hygienic department in which many are interested is that which illustrates improper modes of building, draining, ventilating, and warming, the defects being shown in tenement houses, flats, city and country residences, as well as in public structures. New York and Pennsylvania are especially prominent in showing the latest improvements in the construction of tenement houses and residences for working-men. At the north end of Midway plaisance the women of Philadelphia have reproduced one of the 170,000 cottages owned by the working-men of that city, and here is in truth a model as to sanitary requirements. In the southern portion of the grounds New York is represented by a plain frame structure of two stories, surrounded by a small grass plat and flower garden, such as can be built for the sum of \$900, and large enough for a married couple and a family of several children.

As to questions relating to public health there is also a large amount of material from many states, including diagrams, maps, and publications explaining their sanitary condition, with the means adopted to prevent disease. Water-works and sewerage systems, public baths and lavatories and the various methods for disposing of sewage and garbage are illustrated in this division. Several manufactories also exhibit special appliances, a Des Moines company showing a fire closet made of iron stone, intended for burning the refuse from private or public buildings. In the extreme southeastern corner of the grounds the same company has a furnace constructed for city use in which is



ONE OF THE ENTRANCES



THE CHAPEL OF THE CONVENT

ship's bedding and furnishings, and the wearing apparel of the passengers. The apparatus consists of a series of connected steel cylinders, extending along the wharf, their open ends facing the vessel, and each cylinder fitted with coils of steam pipe. In rear is a large boiler which supplies the steam required to destroy the germs of disease, thermometers placed at convenient points showing when the proper degree of temperature has been reached.

In less attractive fashion is exhibited the quarantine system of New York and the city water supply from the Croton aqueducts, while Buffalo sends photographs of its public crematory, and the Massachusetts board of health an exhibit which is worthy of special mention. In the principal court of the pavilion occupied by this board are diagrams and charts illustrating its scope and work in relation to diseases and epidemics, with vital statistics, statements of comparative mortality, and the influence of density of population upon the public health. As this organization is intrusted by legislative enactment with the guardianship of the inland waters of the state, it has established an experiment station near the Merrimac river at Lawrence. Here samples of the water supplied to cities and towns are analyzed, special reports being made of the results and of examinations into methods of sewage disposal. There are also photographs, charts, filtering sands, a specimen experimental filter, and

consumed a portion of the garbage collected from the Exposition grounds and restaurants.

In illustrating the various methods for the prevention and arrest of epidemic diseases, the plan embraces compulsory vaccination and the results attending the isolation of infectious diseases, as well as measures for the exclusion and elimination of animal epidemics. In this group is fully illustrated the quarantine system of the country, and especially in the appliances used at the Mississippi river station below New Orleans. A model of its plant, which is one of the best of its class, is placed upon an elevated platform, and includes a wharf supported on piles, with a vessel moored to it undergoing fumigation. Alongside the vessel is the quarantine tug-boat, on board of which are the sulphur furnace and suction blower used in purifying the air in the hold. Pipes lead from the tug to the open hatches of the ship, whence the foul air passes through the furnace, while sulphurous acid is forced into every crevice below the decks. Along the front edge of the wharf are the pipe and a connecting system of hose, through which bi-chloride of mercury is distributed wherever a disinfecting solution is required. Along the front of the wharf is a railroad track, with a car containing a second fumigating apparatus, which can be placed opposite any hatchway where it is needed. But the most interesting feature is the method of disinfecting the



CORNER OF THE COURT

other appropriate material. Elsewhere in this section, and in a smaller pavilion or annex, are exposed the various systems of adulteration in food and drugs, with specimens of trichinæ, charts bearing upon trichinosis as existing in Massachusetts, plans of the sewage system of Boston, and photographs of the precipitation works of Worcester by chemical agencies, with views of the sewage fields in operation and diagrams of the principal filter beds constructed throughout the state.

But it is on the department of charities and correction that many of the states, and especially Massachusetts, New York, Pennsylvania, Ohio, and Illinois have concentrated their exhibits, forming together a most elaborate and interesting display. The mentally defective, the deaf and dumb, the sick and injured, the orphan, the criminal, and the pauper, all these and other classes are represented in the many institutions described on printed page, or shown in photograph and model. Of special interest are the miniature reproductions of the New York and Pennsylvania institutions, the model of the Elmira reformatory being the largest in the hall and



LOOKING TOWARD ELECTRICITY BUILDING AT NIGHT

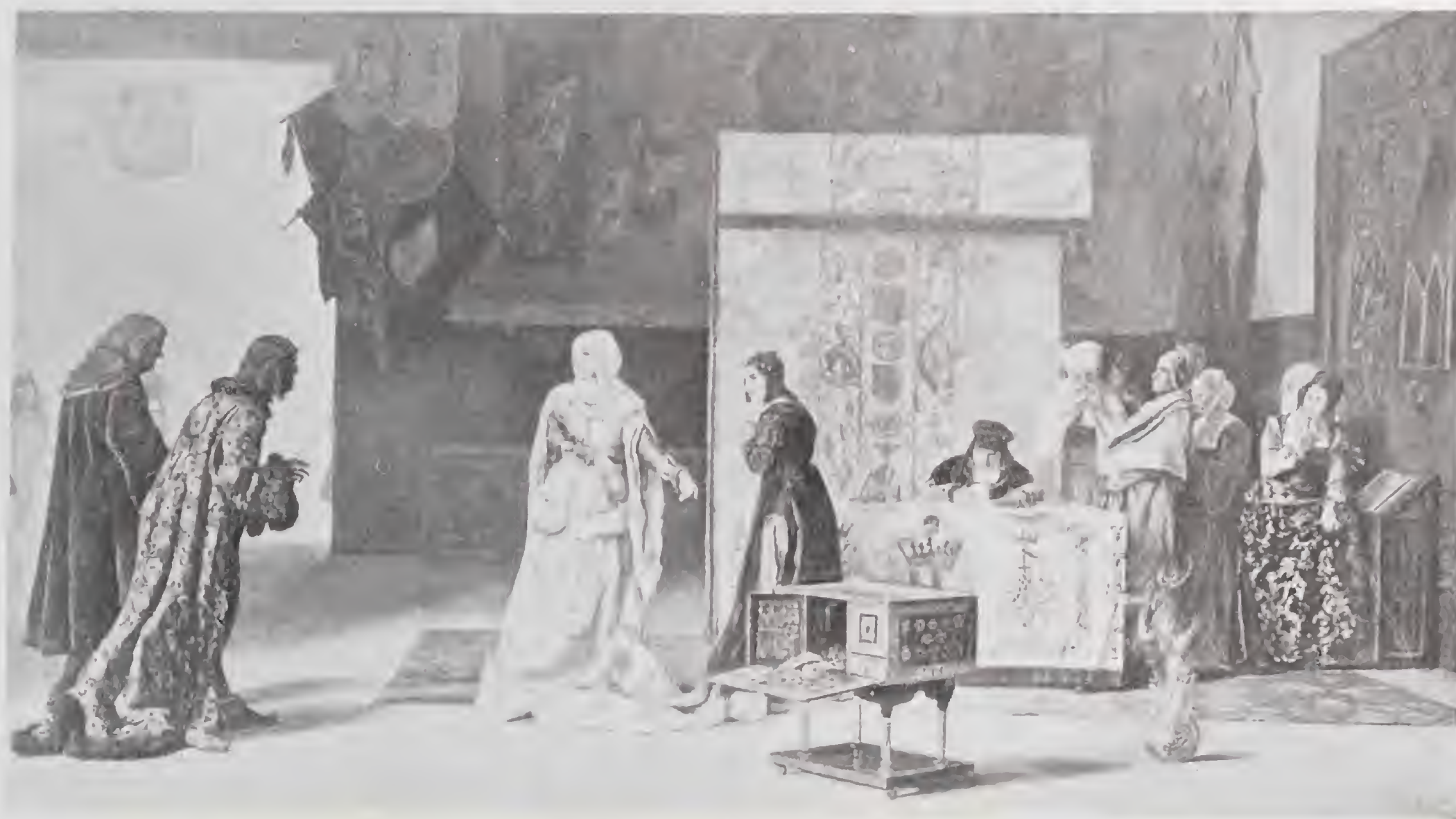
so constructed that the visitor can not only examine the front of the structure but the arrangement of the cells and the interior plan. A ghastly object is the fac-simile of the heavy oaken chair, with its cushioned foot-rest, in which Kemmler, the murderer, was put to death by electricity.

From the empire state are pictures and charts of the Buffalo hospital for the insane, a model of the Utica asylum, and exhibits representing the Willard asylum, the Binghamton state hospital for the insane, and the industrial school at Rochester. There are also contributions from the New York house of refuge on Randall's island, from the Hebrew orphan benevolent association, the Hebrew technical institute, the St John's guild floating hospital of New York, the soldiers' and sailors' home at Bath, and the Fitch crèche of Buffalo, the last with a practical exhibit of its methods and workings in the Children's building. Among others are the Letchworth plan for an almshouse, and such establishments as the Fitch accident hospital in Buffalo, the cancer hospital for women, and the Montefiore home for chronic invalids. Accompanying these exhibits is a mass of general information presented by the state boards in charge of reformatory and charitable institutions.

The excellent penal systems of Pennsylvania are displayed to good advantage in the large and faithful models of the penitentiaries at Philadelphia, Allegheny city, and Huntingdon. The well known reform school at Morganza is represented by specimens of work contributed by the inmates, as also is the industrial home for

blind women at Philadelphia. A number of orphan asylums and aid societies testify to Pennsylvania's activities in this direction, while her reputation for medical science is upheld by such organizations as the Jefferson medical college and the Jewish hospital association of Philadelphia.

In the Massachusetts section there is a model of the hospital department of the state almshouse at Tewksbury, the management of which was investigated several years ago, with results that caused a profound sensation throughout the United States. Another model is that of the McLean hospital at Somerville, including



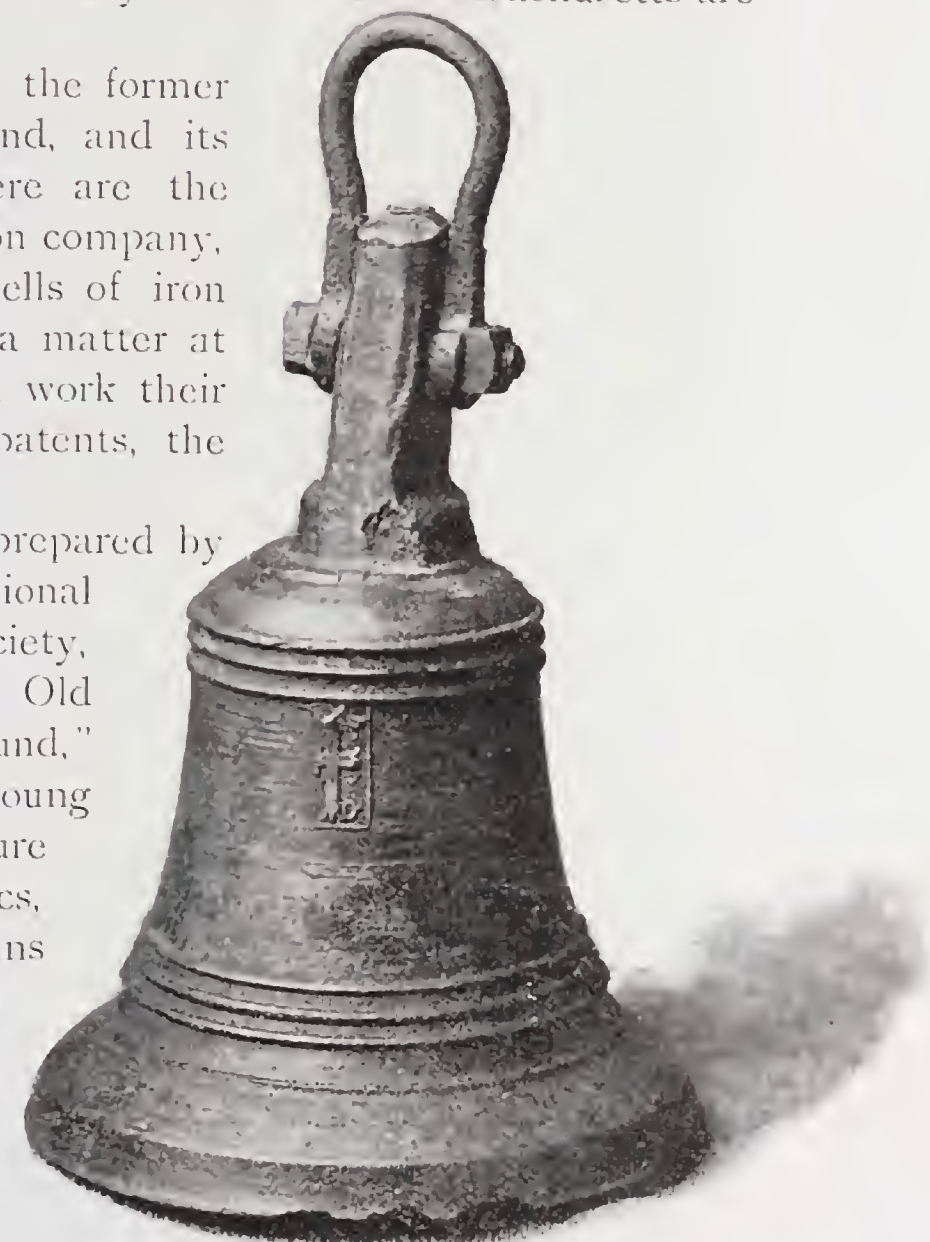
QUEEN ISABELLA OFFERING HER JEWELS

the training school for nurses, with photographs and explanatory material. The appliances used in the Boston city hospital and nurses' school form an instructive feature of their exhibit, and there are specimens of work from several industrial schools, from the reformatory for women at Farmingham, and the penitentiary at Concord junction. With these and a few other exceptions the charitable and reformatory institutes of Massachusetts are represented mainly in pictorial and literary form.

Among the western states Ohio and Illinois are largely represented, the former by its insane asylums, its girls' industrial home, its home for the blind, and its state reformatory. As to the construction of penal establishments there are the exhibits of the Van Dorn iron works, of Cleveland, and the Champion iron company, of Kenton. Here are shown the strongest locks, doors, window guards, cells of iron and steel, and all else that is needed to keep the criminal safely in jail, a matter at least as important as to keep him out of it. The firms which make such work their specialty employ their own architects and control a large number of patents, the secrets of which are closely guarded.

In the Illinois section are charts relating to crime and pauperism, prepared by an expert, and identical with those which were published in the eleventh national census. The charities of Chicago are represented by its Relief and Aid society, its Children's Aid society, by two German organizations, one of them an Old People's home, and by an exhibit in connection with the "fresh air fund," established by the *Daily News* for the care and medical treatment of young children at its sanitarium in Lincoln park. From the school of agriculture and manual training at Glenwood is also a display of photographs, statistics, and specimens of work. Baltimore sends a model of the Johns-Hopkins hospital and illustrates the workings of its training school for nurses, while from other cities and states, and even from individuals are exhibits which attest their interest in this department of the Fair.

In the gallery of the Anthropological building are the sections devoted to natural history, history, and anthropology, the exhibits in the last



FIRST CHURCH BELL IN AMERICA

of these divisions being installed in a series of laboratories. Here are also the offices of the department and a number of miscellaneous groups. Occupying the entire southern aisle is the collection from Ward's Natural Science establishment, of Rochester, New York, in the centre of which is the Siberian mastodon, reproduced from the royal museum at Stuttgart, 16 feet high and with curved tusks six feet in length. Among the remains of mastodons taken from the ice near the mouth of the river Lena, during the eighteenth century, were portions of skin covered with long, coarse hair. Thus, with the skeleton reconstructed, scientists were enabled to clothe it as here represented in its natural state. Near by is the huge frame of a plesiosaurus, 22 feet long, the original of which was unearthed from English soil. The ichthyosaurus, the megatherium, the gigantic elk of Ireland, the wingless moa from New Zealand, the armadillo from Montevideo, and other evolutionary forms of bird, beast, and fish are also displayed in skeleton form or as casts, many of the latter taken from the British museum. Suspended from the gallery ceiling is the skeleton of a whale, and elsewhere a huge octopus with arms outstretched as if to seize its prey. Other specimens there are, from those of mammals, especially deer, elk, and moose, largely from Maine and Colorado, down to trilobites, corals, and crustacea, together illustrating the progressive forms of animal life through many geologic eras.

Of fossils the most valuable collections are from Nevada, Wisconsin, and Indiana, and especially from the first of these states, which shows specimens unearthed in the deepest levels of its mines, some of them

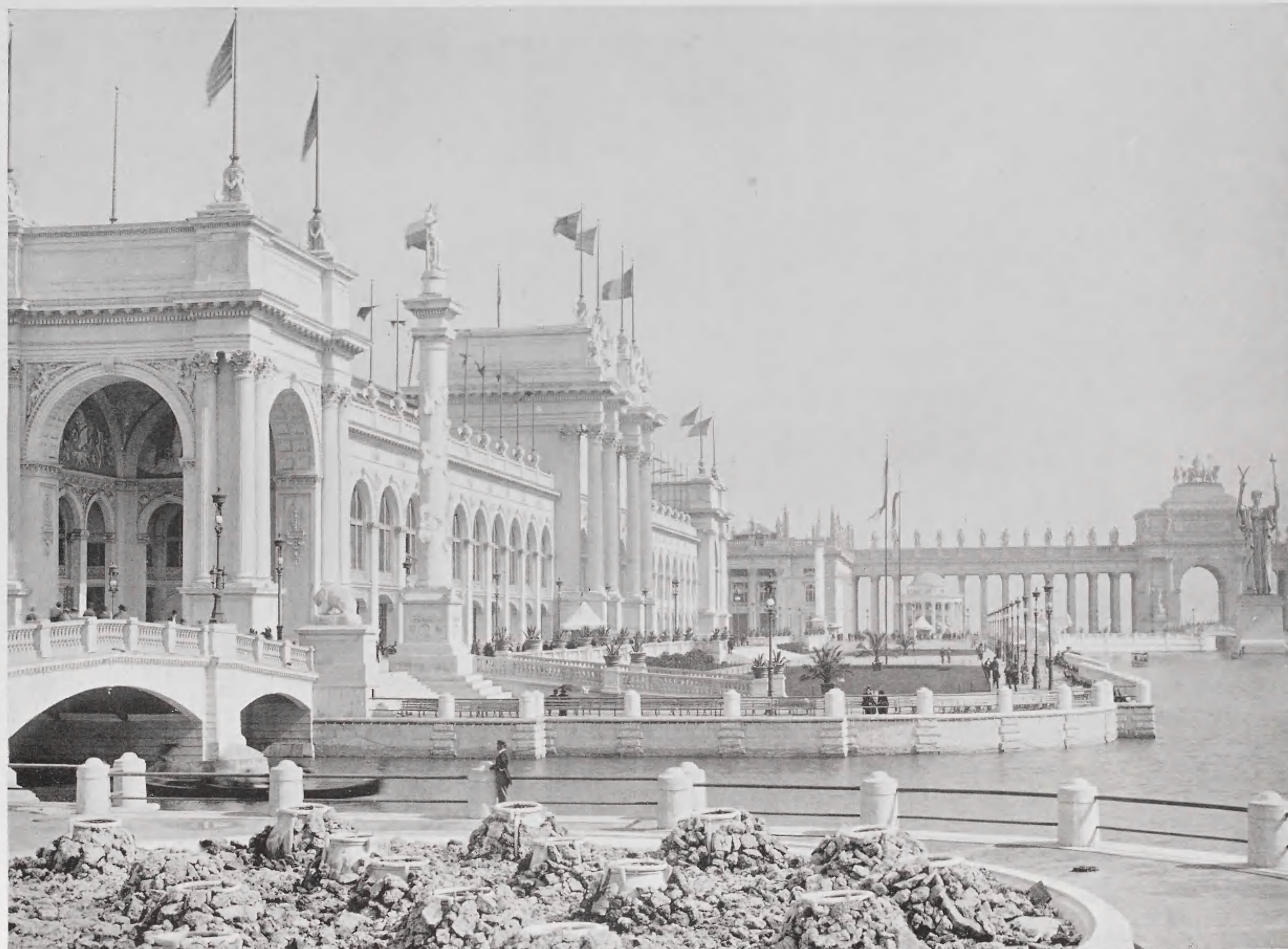


COLUMBUS' RECEPTION AFTER HIS FIRST VOYAGE

from strata 2,000 or 3,000 feet below the surface. Of special interest are the footprints found at Carson in a Laurentian formation of the azoic division of rocks, a granitoid gneiss, in which no traces of life had before been discovered.

In the eastern aisle is fully illustrated by state, individual, and foreign exhibits the fauna of the present and recent periods, grouped in a series of exhaustive and interesting collections. From the New York state museum is a display of mammals, large and small, including life-like specimens of elk and buffalo, and an assortment of land and fresh-water shells. An Albion naturalist has cases of birds' eggs and a number of delicate wall pieces showing the manner of nesting, one of them representing a family of ruffed grouse, the mother carefully guarding the eggs, with a brood of little ones half hidden in the grass.

A group of moose heads is a prominent feature in the Ontario section, and close at hand is a family of otter, one of them in the act of devouring a fish, the latter the work of a New York taxidermist. On a mass of rugged rocks are displayed the birds and mammals of Pennsylvania, the birds among bushes or perched upon branches of trees, a black bear protruding his snout from a cave, and squirrels, otter, mink, muskrats, and other animals, all in their natural habitats. The Agassiz association, of St Louis, Missouri, illustrates its work in promoting the study of natural history, and among private contributions is a collection of moths and butterflies gathered from every quarter of the world. Here also the government of Brazil has a small exhibit,



SOUTH FRONT OF MANUFACTURES BUILDING, WITH SECTION OF PERISTYLE

in which are the crouching cougar, leopard, baboon, boa-constrictor, and various birds of bright plumage and discordant voice.

As to the contents of the northern gallery, they are thus described by the chief of the Anthropological department. "Here," he says, "is a large collection of instruments and apparatus, received from the more important anthropological laboratories of the universities in this country and from several in Europe, with a very interesting series of apparatus made especially for this exhibit by the principal makers in Europe and the United States. The laboratories are divided into three sections—physical anthropology, neurology, and psychology. In these laboratories the practical working of the apparatus is shown, and any one who wishes can have various tests applied, and can be measured and recorded upon cards, which are given to the subject upon the payment of a small fee, while the record is made upon the charts and tables hanging on the walls of the laboratory to illustrate the various subjects. Here, too, is a series of skulls and skeletons and various models showing the physical characteristics of the various races and varieties of man. An interesting series of charts in the physical-anthropological section is that illustrating the development of over 90,000 school children in various



VISTA FROM WOODED ISLAND

cities of North America. Another series of diagrams and maps shows the physical characteristics of the Indians of North America, as derived from measurements and observations upon 17,000 Indians, recorded by about seventy-five assistants of the department, who were engaged for nearly two years in this work. One of the alcoves is devoted to the Sargent models of the typical man and woman and the anthropometrical work illustrating physical development. Another alcove is devoted to the anthropological library formed by the department, and on the walls are the plans and photographs of several of the principal anthropological museums."

Elsewhere is a variety of groups, consisting largely of collections of coins and postage stamps. From a Russian contributor comes a private collection of the rare ancient coins from his native land, with others belonging to the classic era of Greece and Rome. Clocks of an early date, ancient and modern weapons, and antique metal work and ornaments fashioned by the Norse colonists of Iceland are also among the individual displays. Coming nearer home, Pennsylvania and Ohio have exhibits relating to the history of the republic. From the former is a model of the Yorktown court-house of revolutionary days, and the latter reproduces the Campus Martius of Marinette, the pioneer settlement of the west.

Bearing more directly on the Columbian Exposition than any of the collections within the hall of Anthropology are those which are stored in a monastic edifice elsewhere in the grounds. As the visitor passes from

the central court toward the pier which extends into the lake, he observes at the extremity of a rocky headland on his right a gloomy, odd-looking structure, with belfry and tower, with small, dark windows let into plastered walls, and heavy, cumbersome doors, its sombre aspect somewhat relieved by a roofing of red tiles. The building and its immediate foreground are reproduced from the monastery of La Rabida, within a league of Palos, where Columbus, asking for a morsel of bread and a cup of water for his boy, Diego, was invited to

make his abode, and matured the plans which gave to Spain her New World empire.

Rich in historic interest is this little hamlet of Palos, once a flourishing port, but now a dilapidated village, with a few short grass-covered streets, deserted by all except for a few fishermen and farmers, its waters so low that only the smallest craft can reach the rush-grown harbor whence the Columbian flotilla set sail toward the unknown. Here are still



CONVENT NEAR SEVILLE

pointed out the ruins of the house where the Pinzons dwelt, and on a hill in the outskirts of the village is the Moorish mosque, converted into a church, where in May, 1492, the alcalde Rodriguez Prieto read from his pulpit the mandate of the Spanish sovereigns, ordering the people to furnish and equip two vessels for the use of the expedition. Of this mandate or proclamation the original is shown in the chapel of La Rabida at Jackson park.

Apart from the interest which attaches to La Rabida because of the Columbian episode, there are other historic associations dating back to the second century of the Christian era. While the emperor Trajan was sojourning at Seville occurred the death of his daughter, Proserpine, whereupon the governor of the province, to secure his favor, erected a temple where now the convent stands, and placing on its altar a golden image of Proserpine, offered pardon to all offenders who should seek the protection of its shrine, bidding his people here to hold festival on each recurring birthday of the Caesar's child. During the decadence of the Roman empire the temple passed under the control of the Christians, who, assimilating this festival with their own ceremonies, gave to it the name of the Candelaria or Purification. An image of the virgin, a gift from the bishop of Jerusalem, carved, as the legend relates, by Saint Luke, and possessed of miraculous powers, was replaced by the Moors with a bone of Mohammed, which remained on the altar until their expulsion from the western seaboard. In the twelfth and thirteenth centuries the monastery was occupied by the knights-templar, who decorated its walls with classic paintings of considerable merit. After the monks returned to its cloisters, the prior ordered that a coat of white plaster be laid upon them, lest the meditations of the brethren be diverted by these nude figures of Venus and Juno, of Cupid and Bacchus. When Columbus arrived at La Rabida it had but recently come into the possession of the Franciscans, to whom, on the 12th of October, 1492, Isabella of Spain gave a deed conveying all rights and titles.

Such, in brief, is the history of this famous convent, the full title of which, rendered in English, is The Monastery of St Mary on the frontier. In the reproduction is the exact appearance which it presented in the days when Columbus accepted the hospitality of the fathers; for to this condition the original was restored by the Spanish government. The task was intrusted to Señor Velasquez, a trained and skilful architect, a man of artistic tastes and archæological lore, one thoroughly conversant with the religious and historic associations connected with his subject. By a lieutenant in the United States navy, engaged in constructing the Columbian caravels, the plans and drawings of Velasquez were secured for Exposition purposes, and the result was the building already described.



CASKET AND CHEST, CONTAINING COLUMBUS' DUST AND BONES



HOUSE IN WHICH COLUMBUS DIED

A well-known author and naturalist was sent to the West Indies, with instructions to follow in the track of the discoverer, and with photographic apparatus for taking views wherever he might find a subject; another performed the same duty in Spain; by the United States consul at Genoa representations were secured of the birthplace and early career of Columbus, and by a man-of-war were visited the site of Isabella and the spot where the *Santa Maria* was wrecked. From ministers and consuls many treasures were secured, with loans from foreign collections both public and private, and assistance from those who had made a special study of early American history.

The exhibits in the first section are intended to explain the condition of geographic science at the time of the discovery. Among them is a fac-simile of Martin Behaim's globe of 1492, on which is represented about all that was known of the earth's surface at the time of the first Columbian expedition. There is also a group of maps and charts showing the growth of geographic knowledge from the days of Ptolemy, the father of geography, with copies of his works and those of other writers of his age. There is a reproduction in bronze of a celestial globe of the eleventh century, and of Arabian make. There is a crusaders' map of the thirteenth century on which is indicated the route from London to Jerusalem, with other maps and charts from the thirteenth to the sixteenth centuries. There is a portrait of Marco Polo, with a copy of his book of travels with some marginal notes made by Columbus during his several voyages. There are evidences of pre-Columbian discoveries, especially those of the Norsemen, with a picture of a ship such as that in which, in the tenth century, Leif Erikson voyaged from Greenland to Finland. Of exceeding interest are the copies of documents furnished by Leo XIII from the secret archives of the vatican, where 14,000 volumes were examined as to the claims of Norsemen to the discovery of America. While these claims were not substantiated, it was proved that a catholic bishopric existed in Greenland as early as the twelfth century, and that to the east of it were regions peopled by savages.

Another section, relating to the court of

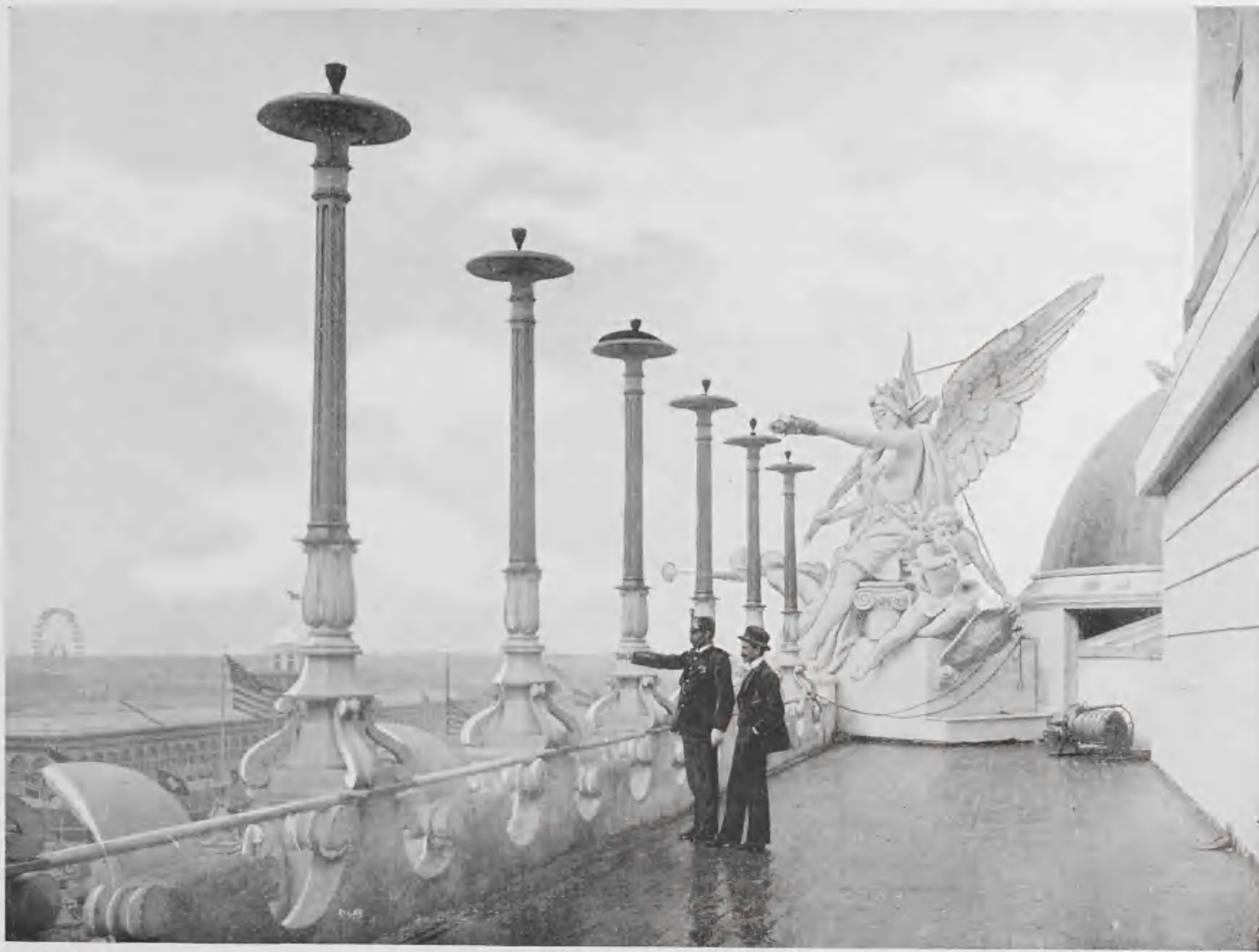
The project for the historic collection of La Rabida was submitted to congress and the board of directors by William E. Curtis, chief of the Latin-American bureau and director of the bureau of the American republics. It was favorably received; was endorsed by James G. Blaine, the secretary of state, and largely through his efforts a portion of the funds set apart for the government exhibit was devoted to this purpose. Then the chief set himself to work, intending, as he says, to gather every existing relic of Columbus; the originals or copies of every picture, statue, and monument relating to Columbus and the history of his career, with all the rare manuscripts, books, and charts pertaining to the discovery and early settlement of America.



THE POPE AT THE TIME OF THE DISCOVERY

Ferdinand and Isabella, contains portraits of the latter as a child, as a queen, in the armor which she wore at the siege of Granada, and in the act of accepting its capitulation. There are also fac-similes of her golden sword, her sceptre, crown, and treasure-chest, with the original of her will executed at Medina del Campo on the 23d of November, 1504, the day before her death. Other portraits and statues are of Ferdinand as a boy and in middle age, of their son, Don Juan of Aragon, of their daughters Isabella and Juana, of Charles V., Phillip II, and Alfonso XII. In models or in graphic art are represented the castle of Medina del Campo, the city of Santa Fé, the tomb of Ferdinand and Isabella, the Alhambra, the surrender of Boabdil, and the Torre del Picos through which the Moorish sovereign rode when about to deliver the keys of his castle and palace.

A third section is devoted to the birthplace, parentage, and boyhood of Columbus, with pictures of every place and scene with which he was identified before his arrival in Spain. There are views of the city and harbor of Genoa, of the house and street in which he is said to have been born, and the home at Quinto



LOOKING FROM THE ADMINISTRATION BUILDING

where his father and mother lived and were married. The village of Cogoleto is also shown, and the street that fronts on its beach, where is an ancient structure with the following pretentious inscription: "Traveller stop at this place. It was here that Columbus, the greatest man in the world, first saw the light; here in this humble house! There was one world: this man spoke, and there were two." There are views of the university of Pavia where he studied; of the church at Lisbon where he married; of the Madeira islands and the houses in which he lived at Funchal and Porto Santo, with a table and a cane made from the timber contained therein, and the door, doorstep, lock, and key taken from one of these dwellings.

Then follows the history of Columbus in Spain, with pictures of the original monastery of La Rabida, and some of the bricks and tiles that were used in its construction more than sixteen centuries ago. In a series of photographs or copies from celebrated paintings, are shown the places where he lived or visited, with all the varied incidents of his career. There is Columbus asking alms at the monastery gate, in consultation with Father Marchena, before the Dominicans, the junta, and the council of Salamanca, at the court of Isabella, recalled at the bridge of Pines, and receiving from the queen the offer of her jewels. Other views are also identified with the story of his life, as of the cell in which he lived at La Rabida; the city of Cordova, its mosque, and its old Roman gate near which he sojourned for several months; the town of Palos, its church of



INTERIOR VIEW OF LA RABIDA

which he carried on his flagship, found in the ruins of the stockade after its destruction in 1493, with other relics gathered in its neighborhood. Of Watling island there are several sketches, including the spot where Columbus is said to have landed; its coast, its lagoons, and interior; its lighthouse, Baptist chapel, and magistrates residence; its farmers and fishermen, the former still earning a scanty livelihood by raising meagre crops of grain and vegetables. From an old print is shown the island of San Salvador as described in the journal of the discoverer. There are also views of St Mary of the Azores; of Lisbon from the point where Columbus landed in 1493; of Barcelona and his reception there by Ferdinand and Isabella; of the wonders which he described, and of Hogarth's rendition of the oft repeated story of the egg.

Pertaining to the second voyage are many views of Isabella, or rather of its ruins, whence and from its neighborhood were transferred to the convent at Jackson park all the relics worth preserving, even to the stones of which its ancient church was built and the Moorish tiles and pieces of metal which the Spaniards brought with them to their first settlement in the New World. There are also fragments of armor, lance-heads, horse-shoes, stirrups, and spurs, with an iron cross of antique design and a hawk's bell used for trading with Indians in exchange for gold. But most interesting of all is the church bell which Ferdinand presented to the infant colony, the first one that proclaimed the glad tidings of salvation offered at the point of the sword. Quite a history of its own has this so-called "bell of the fig tree," on the surface of which are the initial letter of its donor's name and an image of St Michael, the patron saint of its sanctuary. Removed to La Vega in 1494, with everything else that was removable, when gold enticed the Spaniards into the mountains of Cibao, it was hung in the tower of the chapel, and there remained, until, seventy years later, the town was destroyed by an earthquake. For three centuries or more it lay amid the ruins, from which it was unearthed by a shepherd beneath the vine-covered masses of debris that buried the church and its bell. Thence it was taken to a church at Santo Domingo, where ever since it has been regarded as one of its most precious relics.

The third voyage is illustrated in many paintings and photographs, as of the Boca del Drago near which Columbus first set foot on the mainland, and thence turned northward, his system racked with the gout and his eyes almost sightless from exposure and want of sleep. The anchor is shown which he cast off the island of Trinidad on an August night of 1498, when a wall of water from the estuary of the Orinoco threatened destruction to his ships. While digging a trench on a coconut plantation near

St George, and the tavern where he rested midway on his journey from the convent.

In the following sections are illustrated his several voyages and the incidents and associations connected therewith, from his leave-taking with Father Marchena in 1492 to his shipwreck at Christopher's cave in Jamaica in 1504. Relating to the first of these voyages are valuable charts presented by the historian, Rudolph Cronau, with pictures loaned by Spain, Germany, and France, and one by the Italian artist, Gabrini representing his landing at San Salvador. The caravels are reproduced and the departure from Palos, the mutiny at sea and the first cry of land. In photographic form are shown the points at which he touched in Cuba and San Domingo, with the site of the Indian village of Guarico, where the wreck of the *Santa Maria* was brought ashore, from which the admiral built his fort of Navidad. There is also the anchor



MOSAIC PICTURE OWNED BY VATICAN



LOOKING NORTH FROM WOODED ISLAND

Icaques, where the land has encroached on the sea, this anchor was exhumed many years ago, by a party of laborers, probably from the spot where it was lost. There is the autograph letter of Francisco Roldan which caused the disgrace of Columbus and brought him home in shackles. There are pictures of Columbus in chains; of the chains themselves with the inscriptions thereon; of the citadel and cell at Santo Domingo where he was imprisoned by Bobadilla, and a splinter from the beam to which he was fastened in his dungeon. There is a copy of his famous letter written from Cadiz harbor to the nurse or governess of Prince Juan, in which the great admiral bemoans his fate as one who "has now reached the point where there is no man so vile, but thinks it his right to insult him." Finally is shown his reception by Isabella, of which Oviedo writes: "The queen burst into tears and Columbus fell sobbing at her feet. She took his hands and led him to a seat, and when able to control his emotion, he recited at length the wrongs and humiliations he had suffered in her service. Ample restitution was promised; but there is no evidence that Columbus ever received anything more than sympathy."

As to his fourth and last voyage there are pictures of all the places which he visited, with others illustrating the popular ideas of the time concerning New World inhabitants. Among them is a view of Santo Domingo, where for his tiny caravels, about the size of fishing-smacks, he asked in vain for shelter from an approaching storm. A photograph shows a street in Trujillo, near the spot where Columbus landed while following the shore line, still in search of a western passage around the world. But now his strength had departed from him, and all that remained was a shattered constitution, a failing intellect, and an iron will. Nevertheless he persisted, exploring the entire coast of the Isthmus until its unbroken barrier mocked at his life-long effort and forced him to abandon a project dearer than life itself.

On the site of Trujillo he had purposed to found a colony; for here were signs of gold; and leaving there his



MOSAIC WORK IN LA RABIDA

brother Bartholomew with a sufficient force, was about to set sail for Spain, when the embryo settlement was exterminated by Indians and the survivors taken on board the caravels. The Indian huts are reproduced as Columbus found them, as also are the stronghold built by Cortés in 1526 and the chapel erected there in 1540. A scene on the river near Trujillo shows where his men did battle with the natives, and one on the Río Dulce, in Guatemala, where his vessels went ashore. There are views of Puerto Bello, where a band of his colonists, left to espy whence the Indians gathered their gold, found only a nameless grave. The fight with Porras on the coast of Jamaica and the shipwreck at Christopher's cove are illustrated, and there is the "Lettera Rarissima di Cristoforo Colombo," in which are painfully apparent his broken spirit and his tottering reason. "I was twenty-eight years old," he says, writing to the king from Jamaica, "when I came into your Highness' service, and now I have not a hair upon me that is not gray; my body is infirm, and all that was left to me, as well as to my brother, has been taken away and sold, even to the frock that I wore, to my great dishonor."

Still other sections are devoted to the last days of Columbus, his death and burial, to relics not classified in other divisions, and to the literature of the discovery. Engraved on copper, in 1580, is a view of the city of Seville, with the admiral's house and a cross made of New World gold. There is the convent of Cartuja, where returning from his final voyage he sojourned for a season with Father Corricio, spending his time in bemoaning his misfortunes and writing incoherent letters. A fac-simile of an autograph page from his *De las*

Profecias, the manuscript of which is in the Columbian library at Seville, belongs to an unpublished work attempting to prove that his discoveries were prophesied in holy writ.

But let us turn aside from these last sad days, these mournful evidences of "a mind diseased;" for now his end was near. Of the death of Columbus at Valladolid, and the house in which he died, there are copies of pictures by Ortego, Robert Fleury, Carlos Lira, and others, one of them a large oil painting hung in the corridor. Here is shown the building, at that time used as an inn, where on the 20th of May, 1506, he breathed his last, with none at his bedside, so far as is known, save for his brother Bartholomew. It is a plain unpretentious structure, still almost intact, and over its doorway hung, until recent years, a sign announcing the sale of *Leche de burros y vacas*—that is to say, of cows' and asses' milk. As to this event the chroniclers of the age are singularly reticent; nor was there even official record, until on the back of one of his appeals to the king, received many days after his decease, was endorsed by a clerk the simple legend: "The within admiral is dead." Thus unhonored passed away the man whom all mankind has honored, and never more so than on this the fourth hundredth celebration of the greatest achievement recorded on history's page.

In graphic art are reproduced the chapel of the convent at Cartuja, where his remains were laid at rest, the cathedrals of Santo Domingo and Havana to which they were removed, and in fac-simile are his leaden coffin and its enclosing urn. There are photographs of his bones and portions of his dust, the latter in locket and crystal case. Of his brothers, his son Diego, and certain of his descendants, including the present duke of Veragua, there are autographs and portraits, and prepared by the duke himself, whose parentage and ancestry are freely represented in pictorial form, is a diagram tracing the lineage of Columbus down to the present day.

Among the Columbian relics contained in a special section are copies of several of his formal, autograph letters and documents, of which more than sixty are still preserved; for Columbus was a voluminous writer, and as the court jester of Charles V remarked, "He and Ptolemy the geographer were twins in the art of



IN THE VATICAN COLLECTION

blotting." His coat-of-arms is shown, with the original decree which granted it, a photograph of his breviary, or of what is supposed to have been his, and some of the actual coins, of which about a score are still in existence, fashioned, as is said, from the gold which he brought with him from Española. There is a photograph of the votive offerings which he left on the shrine of the virgin at Siena in northern Italy, and as a loan from the national museum at Washington is one of the bolts to which he was chained in his dungeon at Santo Domingo.

As to the literature of the discovery there is here reproduced the title page of a letter published in pamphlet form in 1493, a few months after Columbus' return to Palos. On his homeward voyage he wrote two accounts of the expedition, one of which was rendered and printed in Latin; but this priceless manuscript, after serving its purpose, was probably thrown away as useless; for it has never been found. It was but a tiny pamphlet, without the least attempt at ornament or even an initial letter; yet it passed through several editions the first one containing only eight pages with thirty-four lines to the page. Translated into English the title reads in part as follows: "Letter from Christopher Columbus, to whom our age oweth much, concerning the

islands of India beyond the Ganges, recently discovered, in the search of which he was sent eight months ago under the auspices and at the expense of the most invincible King of the Spains, Ferdinand. Addressed to the noble lord Rafael Sanchez, treasurer of the most serene King, the year one of the pontificate of Alexander VI." Of this edition only three copies are known to exist, one in the British museum, another in the Royal library at Munich, and the third in the Public library at Boston, purchased at public sale in 1890 for the sum of \$3,000. Of other editions there are copies in various institutions and a few perhaps in private hands.



ILLUMINATED MANUSCRIPT IN VATICAN COLLECTION

A second description of the voyage and its results was addressed to Luis de Santangel, and of this a copy of the first edition, printed at Barcelona in 1493, and said to have been found in Spain in 1889, was secured by the Lenox library of New York. The printed matter, which is in black-faced type, is contained on two leaves of the coarsest of paper, and to these others have been stitched, preserving the copy in good condition after four centuries of time. On one of the outer pages is a brief biography in manuscript of Saint Leocadia, one of the martyrs put to death at Toledo in the year 304.

Of the second voyage a narrative is shown in a ten page Latin pamphlet printed at Pavia in 1494, of which only two copies are known to be extant. As a loan from the congressional library is one of the three existing copies of a sermon of Bishop Carvajal delivered

and published in 1493, in which, passing in review the reign of Ferdinand and Isabella, he places first among its achievements the discovery of the western world. A photographic copy shows the famous bull of demarcation issued in May of the same year by Alexander VI. Another contribution from the library of congress is the first drama relating to America, published in 1494. One of the treasures of the collection is the original of the Da Vinci map, showing as islands Florida and Newfoundland, with an imaginary passage westward to the ocean north of the coast line of South America. This is from the library of Queen Victoria, while from the Spanish government is the original of Juan de la Cosa's chart of the West Indies drawn on an ox hide in 1500.

In a modern reprint is the Guiliano Dati poem, a metrical translation of the Santangel letter by the bishop of Saint Leone, and in the sorriest of doggerel. Among other works are *Cosmographie* by Peter Apianus, a life of Columbus by his son Fernando, a history of the voyage of Magellan, the first three English books on America, a translation of the log book of Columbus, and one of the first sketches of his life, bearing date



SOUTHEAST END OF THE WOODED ISLAND

1516. Of his first portrait there is a wood-cut from the original painting in possession of the bishop of Norica, and there is a rude wood-cut showing the natives of the West Indies preparing for a cannibal feast, this being the first pictorial illustration whose theme is the aborigines of America.

In two chambers of the upper cloister is a collection of pictures and books relating to what is termed the christening of the continent, showing how America received its name. Another section is devoted to the

conquests of Mexico and Peru, and still others to the original papers of or pertaining to Columbus, including his commission from the crown, with many of his letters and those from the sovereigns of Spain and Portugal. Finally there is the vatican exhibit and a contribution from John Boyd Thacher relating to the discoverer and his discovery. In the former is a picture of "St Peter Weeping," after Guido Reni's masterpiece, the execution of which was a six years' labor of love. Others have for their subject "The Prophet Isaiah," "The Roman Forum," and "Theology," the last a copy from Raphael. The pope is shown in the act of blessing the people.



SECTIONAL VIEW OF THE FAIR

and by Chatrau is a portrait of Leo XIII, as a token of his interest in this department of the Exposition. There is the Borgian map of America by Ribero, finished in 1529 presumably for Charles V. To the same date belongs the Ribero vellum chart of the old and new world. There are also several letters and bulls from the chief pontiffs, the oldest of them being from Nicolas V, an epistle of the 20th of September, 1448, and relating to the condition of the church in Greenland.

WORLD'S FAIR MISCELLANY.—To William E. Curtis, chief of the Latin-American bureau, I am indebted for a valuable dictation on the monastery of La Rabida and its contents.

The ruins of Yucatan, discovered several years ago by E. H. Thompson, resident consul at Merida, were partially reproduced, as I have said, to the north of the Anthropological building, with a mechanical imitation of tropical verdure. For the latter purpose a pulp mixed with vegetable fibre was used, the base of which was a thick, tough paper, and this was hammered into every crevice of wall or sculptured figure. Seventeen months were thus spent by the consul and his Indian assistants before the casts were ready to be shipped to Chicago, and reproduced in staff. The ruined city of Uxmal, from which the most interesting sections of architecture were copied, is situated in the southeastern portion of Yucatan, more than 100 miles inland. Perhaps the most striking feature in this collection was the facade of the temple which showed the figure of the great feathered serpent, the ancient god Kukulkan.

Immediately west of the Anthropological building, in what appears to be a massive cliff of reddish brown, is represented Battle Rock mountain, a weird and solitary landmark of the desert of southwestern Colorado. Here are the so-called Cliff palace, Balcony house, and other abodes once inhabited by the cliff-dwellers. A museum shows in fac-simile their pottery, weapons, implements, ornaments, clothing, and mummies, as found by exploring parties. There is also a cave filled with oil paintings reproducing other features in these prehistoric settlements, while at the base of the hill outside are small herds of deer, mountain sheep, and burros, browsing on sage-brush and yucca as in their native country.

Among rare archaeological specimens are the hand of Buddha, webbed up to the middle joints of the fingers, and the fragment of a temple frieze, found a few years ago by an officer in the British army, in the northern portion of India. Portions of other friezes have been discovered in the same locality and deposited in the British museum; but the figures upon them represent war, hunting, or athletic sports.

The central figure of the fragment here exhibited is that of Buddha holding in his hand the sacred lotus. A statue of Demosthenes, also reproduced in this department, was discovered in the country between the Swat and the Indus. It is supposed that the sculptor accompanied Alexander the great on his campaign into this part of Asia, and the work would thus bear date about 330 B.C.

What is claimed to be the largest piece of lapis lazuli in the world was displayed in the Anthropological building. It was found in one of Bolivia's ancient tombs, is of beautiful color, and 30 by 18 inches in dimensions.

On the eastern shore of the south pond are groups of huts which, with their inmates, form a most interesting exhibit in the ethnological department. In the largest cluster is illustrated the daily life of the British Columbian and Alaskan Indians, their hideous totem poles standing in front of their village. Some of the poles supported the roof beams, and have carvings upon them of tribal significance. On one of the front posts of a hut occupied by the Nanaimo Indians, of Vancouver island, is the spirit of the sea called Squa-eque, and upon the rear post, a figure explained as "a man holding a goose." Another heraldic column has a raven upon its upper portion, and below, the spirit of the sea, whose open mouth forms the doorway. Through the legs of grizzly bears the visitor passes into other dwellings. The mythical thunder bird is perched over the door of the structure occupied by the Kuakiutl Indians, and on either side is a painting of the sun. Upon the totem poles of the Haidas and some of the Alaskan tribes are gigantic figures of sparrow hawk, wolf, eagle, bear, and frog. Moored to the shores of the pond are two long canoes, such as the Indians of Vancouver use on their hunting or fishing excursions. In all the totem-pole villages are Indians and their families, living as they do at home. Near by are represented, in a reproduction of the council-house of the Iroquois, the historic six nations of New York. The building is of bark, and in rear of it is the typical stockade. Within are chiefs of the Senecas and Onondagas, the latter being the keeper of the ancient council fire. There are also the wampum keeper of the allied tribes; their grand sachem, Colonel Eli S. Parker, one of General Grant's officers; a descendant of the famous chief, Cornplanter, and a proud looking little red man, well along in years, who claimed to be in his day the champion runner of the world, having made a won-

derful record before the prince of Wales about a half a century ago. Accompanying these notables of the male sex are several well-favored women, attending to household duties or offering for sale the products of their labor and skill.

Near the council-house of the Iroquois are several tepees of birch bark in which live about a dozen Penobscot Indians, a remnant of a once powerful tribe, now reduced to a few hundred members, living on Indian island, or at Old Town, on the Penobscot river. The Crow have also a lodge of skins, colored with red and yellow ochre, and the Navajos occupy a log hut covered with sod.

North of this ethnological exhibit, organized as an illustration of the primitive life of the aborigines, is shown the reverse side of the picture. During the term of the Fair, Indian boys and girls whom the government was educating at different institutions in New Mexico, Kansas, Indiana, and Pennsylvania, were sent to the model school of the Exposition. Of these and the attendant exhibits mention has been made in the chapter devoted to the government exhibits.

In the Anthropological building, one of the assistants in the office of the chief of department was a tall, sinewy, finely-featured, full-blooded Apache named Antonio. He was born somewhere in the Sierra Madre mountains, Arizona, and then a child was captured during the government campaigns of 1877 against the famous chiefs Geronimo and Cochise, of whom he is a relative. Taken to Fortress Monroe, he afterward went to Europe on a yacht, becoming proficient in various trades and receiving his education at the night schools of New York and Boston. During the preliminary work of the department Antonio met his employer at the Peabody museum, and was sent among the Navajos and Apaches to collect exhibits. At last accounts, Antonio's ambition was to visit the Antwerp exposition, as the employé of some American exhibitor, and eventually to complete his education at Harvard university.



ANTONIO APACHE





LANDING IN FRONT OF THE ART PALACE



CHAPTER THE TWENTY-FIRST FINE ARTS

IN this era of international expositions there is perhaps no department in which their stimulating influence has been more strongly felt than in the fine arts; for nowhere else can be compared to such advantage the productions of all lands where art has found a home. Of the frequent recurrence of these expositions, which, like the development of railroad systems and electrical appliances, are among the features of the age, one of the effects has been to give to art a more cosmopolitan character, to make each of the great expositions held since 1851 a universal school of art whence new departures might be taken, where artist and public alike might discover how much they have yet to learn, how much to unlearn.

While the display of art at the Centennial Exposition was not its strongest feature, it served, among other purposes, to give impetus to professional education, and for that reason, apart from the question of merit, it is and will be remembered. That since 1876 we have acquired a better knowledge of what constitutes real art, together with more ability to produce it, there is sufficient evidence in the home exhibition here to be passed in review. Notwithstanding its defects and shortcomings, we have now at least a school of our own, with a large and intelligent constituency among whom there is no want of culture and discrimination. Even to those whose homes are far removed from art centres, such exhibitions tend, as in other departments, to quicken the sense of comparison and appreciation, to define more clearly our position in the scale of modern achievement.

In the number, and in some respects the quality of the exhibits, none of the former collections will bear comparison with that which is the crowning artistic feature of the Columbian Exposition. Never before were there so many participants both national and individual, covering the entire realm of art, and some of whom, as Brazil and New South Wales, have found no place at previous exhibitions. While in painting and statuary it may have been excelled by the Parisian display of 1889, this cannot be said of other departments. In engravings, etchings, drawings, and architectural designs, the galleries are especially strong, and this is as might be expected, for only in these and kindred branches, all of comparatively





APPROACH TO THE PALACE OF FINE ARTS



THE NORTHEAST CORNER

modern growth, has any decided progress been made within recent years. Engraving, it may be said, is as much an art peculiar to the nineteenth century as devotional paintings were to the middle ages, one especially developed by the demand for illustrated works, publishers and readers fixing the standard of excellence in the nineteenth century, as did priests and worshippers in the fifteenth. Thus it is that progress has been rather in artistic processes than in art itself; for here is a branch in which new modes of treatment are being con-



WATERWAY IN FRONT OF ART PALACE

stantly evolved to keep pace with the exigencies of the times, and hence with a certain freshness and vigor that does not pertain to art in its highest sense. The latter, though with new tendencies and developments, has been far less progressive, the improvement being almost restricted to countries where art is still in its formative period, while in the great centres, as in Italy and France, art, whether plastic or pictorial, remains at best where it was. In architecture treated as one of the fine arts there has been perceptible progress, and of this no further proof is needed than the hundreds of scholarly and appropriate designs contained in the exhibition.

Of the city of the Fair it has been well remarked by one of its artificers that in these leviathan structures architecture in its highest sense is not represented. "Rather," he says, "are they a scenic display of architecture composed of models executed on a colossal stage, and with a degree of apparent pomp and splendor which if set forth in marble and bronze

might recall the era of Augustus or Nero." But however just may be this remark, it does not apply to all the buildings, and especially to the temple of fine arts, a gem of the purest water, and reproducing in its graceful outlines the chaste and classic features of the Ionic school, taking as the keynote of the plan the temple of Athena Polias in the Erechtheum, though with traces of the Corinthian and Doric orders. Among those who have beheld this edifice, of itself a work of art, their pleasure was not impaired by regret that within a few brief months it was doomed to demolition; for here was no ephemeral structure, but one with walls of brick; with merely a coating of stucco, and with roof of iron, steel, and glass, one which after the close of the Fair would remain as among its monuments, to be used for museum purposes and for the safe keeping of the many valuable exhibits presented to the management.

The Art palace, suitably located in the northern section of the grounds and dividing the main edifices from state and foreign pavilions, is the only windowless structure of the Exposition. By the glazed ceilings a sufficiency of light is furnished, and through the structural design of the interior so modulated as to display to the best advantage the various classes of exhibits without conflict of shadow or reflection. To relieve them from monotony the exterior façades were adorned with mural paintings representing the history of art, and to give to them a play of light and shade the building was partially surrounded with a colonnade, its pillars, eight feet from the wall and nearly thirty in height, forming a covered walk or piazza extending from the central portal to the corner pavilions. To this portal broad flights of stairs, flanked by balustrades and terraces, lead from a landing place on the northern arm of the lagoon.

The general plan, apart from its decorative features, may be described as that of a continuous series of compartments, flat-roofed, sky-lighted, somewhat less than 50 feet high, and resting on a basement raised nine feet above ground, the entire structure forming an oblong, 500 feet in length by 320 in width, and covering an area of nearly five acres. At the corners are projecting pavilions of similar height, giving accent to the design. The clear stories and roofs over the several courts are fashioned with level sky-lines, and from their



FACING WESTWARD



IN THE PORTICO

from caprice or playfulness, refined by scrupulous decorative sculpture which could be consistently recalled by historic art, so that when completed it should be fit to enshrine the figures and groups in marble and bronze, the paintings in oil, water color and fresco, the carvings in ivory, wood, and marble, the bas-reliefs, engravings, etchings, and drawings by which the century is taking its rank in history. It was a part of the scheme to make the numerous statues, friezes, and other decorations, in the round and in relief, replicas of the greatest masterpieces of Greek and Renaissance art, so that the building itself should be a museum, not of historic sculpture only, but of painting."

In the interior the fundamental plan was not, as in other buildings, a great central hall, but a continuous series in two divisions of courts and galleries, one devoted to plastic, the other to graphic art,

central point of intersection rises from a spacious rotunda to an elevation of 125 feet, and with nearly half that diameter, a dome surmounted by Martiny's heroic statue of Fame. The principal entrance-ways, in the centre of each of the main façades, are in the form of porticos, with columns of the Ionic order, and above them are attics, on the pilasters of which are figures resembling those of the temple at Agrigento. In the middle of the end façades are similar porticos, but on a less imposing scale.

By the Exposition architect already quoted the exterior design of the Art palace is thus described: "The objects of this building seemed very clearly to invite a monumental expression, set forth in terms connected with the evolution of the highest civilizations in history, associated with the greatest triumphs of art, established by the usages of the greatest masters and formulated by the schools and academies of all nations. It was necessary that it should be pure, formal, and stately, entirely free



THE WEST WING



ONE OF THE ENTRANCES

and each with suitable arrangements as to size and shape. On either side of the nave and its intercepting transepts are grouped the exhibits of sculpture and statuary, while from the longer courts there is access to transverse picture galleries, their outer doors opening into larger galleries, forming a continuous promenade and communicating with the corner pavilions. Thus is afforded, with excellent facilities for classification, a hanging space of about 150,000 square feet. Some 25 feet above the main floor is a gallery 40 feet wide surrounding the entire building, and over this another gallery, containing among other exhibits that of the society of Polish artists, presently to be described. In these galleries are most of the water colors, the etchings and engravings, the pastel, pen and ink, charcoal, and other drawings, the architectural themes, and the overflow of paintings in oil, the majority of which, together with nearly all the statuary, find a place on the ground floor.

To Charles B. Atwood, designer-in-chief of the bureau of construction, we are indebted for this reproduction of the purest of classic models; and if we behold with a tinge of regret its perfect outlines, its wealth of artistic embellishment, it is only that these stately colonnades, with the ornamental statuary of the building



ARCHITECTURE, MARTINY

collections, which are distributed throughout the galleries and include some of the finest works of the great masters. For architecture as a fine art there is no separate group, this branch being included, or rather touched upon in connection with other groups, though forming a prominent feature in several of the national collections. As in other departments, the exhibition will be treated by nationalities, and without special regard to location; but among the many thousands of contributions gathered from every quarter of the world, it will be impossible here to make other than briefest mention of the more prominent works.



MARTINY'S MUSIC

and grounds adjacent, were not fashioned of some more lasting material than wood and staff. While the chaste simplicity of the design owes little to its decorative scheme, that little is in perfect taste, and the exterior aspect of this edifice cannot be better described than in the two expressive words which Horace applies to the Roman maiden, *simplex munditiis*.

On the frieze are figures by Martiny, works representing Sculpture, Painting, Music, and Architecture treated as one of the fine arts; between them are medallion portraits of the old masters from the hand of Olin Warner, and on either side winged female forms with floral garlands. Sculpture is the most robust of the four sisters, with opulent form of strong and massive proportions. Painting is a somewhat sensuous muse, as appears from the lines of her face and figure. Music is skilfully personified, chaste and refined as to features and drapery, and of serious aspect. Architecture is a stately personification, with earnest, thoughtful face, on which is the stamp of intellectual power. On either side of the main portals are female forms supporting the pediments, and near them lions couchant.



HALSEY C. IVES

The exhibits contained in the Art building are classified under the following groups: sculpture in marble or bronze, with models, monumental decorations, and casts from original works; paintings in oil; paintings in water colors; paintings on ivory, enamel, metal, porcelain, or other ground work, with fresco paintings on walls; engravings, etchings, and prints; chalk, charcoal, pastel, and other drawings; antique and modern carvings, engravings in medallions or gems, with cameos and intaglios, the final group being devoted to private

collections, which are distributed throughout the galleries and include some of the finest works of the great masters. For architecture as a fine art there is no separate group, this branch being included, or rather touched upon in connection with other groups, though forming a prominent feature in several of the national collections. As in other departments, the exhibition will be treated by nationalities, and without special regard to location; but among the many thousands of contributions gathered from every quarter of the world, it will be impossible here to make other than briefest mention of the more prominent works.

In the interests of the Art department, and of American artists in relation

to that department, there were established, as I have said, in the principal art centres of Europe and the United States advisory committees, forming the nuclei of juries of selection. Of these committees and juries organized in Boston, New York, Philadelphia, Paris, Rome, Florence, and Munich, the members were for the most part not only artists of repute, but the most competent and impartial critics that could be found in the several branches of the profession. Competitors were required to forward their works to the nearest or most convenient point where a jury was established, New England contributors, for instance, sending their exhibits to Boston, and those of the middle states to New York or Philadelphia. Thus was afforded a wide range of jurisdiction, and the cost and delay avoided of sending to Chicago for approval numerous paintings and drawings of which only a small proportion could be accepted. Moreover foreign artists were unwilling to submit their canvases to a jury composed mainly of American critics, and especially of western critics. As matters were thus arranged the



PAINTING, MARTINY



INTERIOR PALACE OF FINE ARTS

Chicago jury was little more than a hanging committee, assigning to each work its space in the order of merit as determined by the juries of selection, from whose decision there was no appeal, those marked No 1 being first provided for, and then the other classes as room permitted. In December 1892 the work of collecting was finished, and early in the following month the jurors began their unwelcome task. No sooner were the results made known than a storm of indignation arose among the thousands of unsuccessful candidates, and for several weeks the newspapers were filled with groundless charges. That mistakes were made is not denied; but *Quis judicabit ipsos judices?* Certainly it is not my purpose here to pass judgment upon the judges, whose duties appear to have been faithfully performed, and with no indications of prejudice or partiality.

To the chief of the department, Halsey C. Ives, his aids and advisory committees, is largely due the success of this rich and varied display of graphic and plastic art, forming as it does the culminating feature of an exposition which is of itself the most striking manifestation of art that the world has ever witnessed. In the United States section are the choicest works that could be obtained from the painters, engravers, etchers, sculptors, and architects of the day. In Europe the chief visited all the principal countries represented at the

Exposition, conferring with the more prominent artists, professional and amateur, with the directors of art schools and museums, with government officials and the commissioners appointed for his department. The result was that European applications exceeded by 130,000 square feet the amount of space at the disposal of the management.

Before proceeding further it may here be stated that while one of the most elaborate and attractive exhibitions recorded in the chronicles of art, it has suffered, in common with other departments, from the imposition of a tax on



CORNER OF THE UNITED STATES SECTION

some of the choicest productions of foreign artists. Of a French master of world-wide repute, it is related that when asked by one of his American brethren of the craft to send a few of his choicest canvases, he thus declined the request: "No, sir, I thank you, I do not propose to pay your government thirty per cent of the value of pictures which I can probably sell to better advantage in Paris, or to take the chances of losing them, or having them returned in damaged condition." While through the precautions of the management risk of loss or injury was reduced to a minimum, the Frenchman's complaint as to this assessment on the products of his labor was not without justification. Save perhaps for the poll tax, a relic of the dark ages, there is no more barbarous impost than that which thus was laid on Exposition works of art. As well might we tax the cardinal virtues or the ten commandments.

But to provide for a creditable display of American art was the main purpose of the department, and in this connection its chief remarks: "The position held in this Exposition by our artists, as compared with those of other nationalities, will have much to do with determining the general estimation of our art by our own countrymen, as well as by foreign visitors, for many years to come. It is therefore of the highest importance to every American engaged in artistic pursuits that the exhibits of American art work should be of the highest quality obtainable; that each example shown represent the highest achievement of the artist, and that the

collection as a whole present in a dignified manner the best productions of our native art." Certain it is that if careful selection could accomplish this end, we have in the United States galleries a worthy expression of domestic art; for of the 1,350 works which New York painters submitted for approval only 325 were accepted, while of 600 each from Massachusetts and Pennsylvania artists, 139 and 112 respectively were chosen by the juries; this for oil paintings only, which formed little more than one third of the entire collection. Western candidates fared even worse, only 73 paintings in oil being selected from 638 that were offered, with 18 out of 177 water colors.

While by no means "the best display of art from any nation," as the vainglorious among our countrymen would have us believe, the galleries devoted to domestic art contain much that is of value and interest, with more of promise yet to be fulfilled. By American visitors to the Fair none of its departments were inspected with closer scrutiny, with greater solicitude and curiosity, for never before had American art received adequate expression at an international exposition. That we could hold our own in the mechanic and liberal arts, in agriculture, mining, stock-raising, and other branches of industry was not for a moment doubted; but



in pictorial and plastic art how would we compare with the painters and sculptors of European nations, their works evolved amid the fostering influences of a civilization compared with which our own is but of yesterday? Must it not be admitted that in art as in literature we were not old enough to bear such comparison; that our brief cycles of national existence, with their recurring phases of commercial and industrial progress, have not been sufficient to afford a national perspective; that our line of horizon is too near the point of vision, and that only as personages and events recede into distance could be fully developed the ideal faculties essential to historic art, as to history itself, to poetry, and even to the higher class of fiction? But these questions we will leave our foreign critics to answer; for with a nation, as with an individual, few can judge aright their own achievements.

Of all the criticisms pronounced on the American section none were so severe as those of the Americans themselves, and while some were just, more were partially or altogether unwarranted. First of all it was objected that the pictures were too large; that here was not art in its essence but art by the acre, the average dimensions of the canvases rising far above the usual standard. To this it may be answered that, while size is not of itself a merit, the general effect of a series of large galleries, permitting a focus of long range, is better when filled with paintings proportioned to their dimensions. Then it was said that too much space was occupied with a redundancy of commonplace portraiture. Another cause of offence was the imitation of French sensationalism and straining after effect, with the florid coloring and jejune composition of modern Parisian schools. While this may be true in a measure, so that here and there the visitor would ask himself whether he was in the French or American galleries, there are many canvases which rise far above the mediocrity characteristic of

Salon exhibitions. At least it can fairly be claimed that within the last score of years there has been a decided improvement in the better class of American art, while of French art, except for the works of the great masters, it can only be said at best that it remains about where it was. In truth it may almost be asserted that this nation of artists, which has taught all the world how to paint, is itself in danger of forgetting the highest principles of art.

But from the charge of alienism the American display cannot be entirely exculpated, and especially is this true of works which take for their theme historic events and characters. Among all this collection of more than 1,000 paintings in oil there is not one of special excellence, and there are not a dozen in all, which treat of the annals of our country. The same remark applies also to our statesmen and diplomats, our drama, music, and literature, none of them finding adequate representation at the hands of our artists. Landscapes there are in abundance, which if not in the style of a Corot or a Daubigny are of unquestionable merit. There are marine and other views, faces and figures of man and beast, flowers and fruits, moonlight and melody ad nauseum. But we search in vain for anything that reminds us of the stirring episodes in our national history, of Lexington or Gettysburg, for instance, of Yorktown or Appomattox. In statuary and paintings many of our historic personages are better represented in the foreign sections than in our own, and in this, our Columbian



Exposition, Columbus and his times are almost excluded from the galleries of the United States. To call attention to these defects is but an unthankful task; but as with other departments of the Fair, it is

my purpose to describe them as they are, or were, and not as we would have them to be. "Do your artists care nothing for your republic?" inquired one of our foreign visitors; and said an American, "After I had made a tour of the galleries, and compared the exhibits of European nations with our own, I felt like a man without a country."

In sculpture and statuary the United States appears to good advantage, considering the slight regard for plastic as compared with graphic art. While there are few who share Emerson's opinion that sculpture must now be numbered among the lost arts, it may be said that in its highest sense it is practically limited to the French and Italian schools, and even these are not here represented as at European expositions, so far at least as contemporary art is concerned. While from the former are many of her most finished works, including a valuable collection of casts of historic sculpture, the display has been far surpassed at previous exhibitions; and apart from ancient bronzes, Italian statuary, pretty though it be, is stamped by the trivial and inane.

Small, but full of promise, and with several works where promise and performance meet, is New England's display of statuary, which it need not be said is almost entirely from Boston, the cradle of American art. Among the best of her specimens are Alice Ruggles' bronze figure of an Italian child, "Aux bords de l'Oise," one which, though somewhat faulty in attitude, is not without grace of form and feature. By the same artificer

are plaster casts of "Young Orpheus," and "A New England Fisherman." From Henry H. Kitson comes a piece of bronze statuary whose theme is "Music of the Sea," with two plaster casts and a portrait bust in marble; but this sculptor is better known by his memorial fountain, executed for the Roger Williams park in Providence, representing the figure of primeval man in conflict with an eagle, symbolic of nature's forces. A work of unquestionable power is "The Angel of Death Arresting the Hand of the Sculptor," by Daniel C. French, a resident of New York but a New England artist. In the features and figure of death as thus personified, there is nothing of a repulsive aspect, but rather a classic dignity and repose, without the least suggestion of violence. In contrast with its stately and commanding presence is the alert and vigorous form of the sculptor, whose mallet is at once arrested by the touch of a resistless hand. In his face is no expression of fear; only of astonishment and regret that his task must forever remain unfinished, that his life and work are ended.



DEATH ARRESTING THE HAND OF THE SCULPTOR. BY DANIEL C. FRENCH

Of the contributions by William Ordway Partridge, one is a plaster replica of the statue of Shakespeare erected in Lincoln park, Chicago; and there are busts of James Russell Lowell, Edward Everett Hale, and other personages real or imaginary. In his "Head of Christ" the features are portrayed with a spiritualized beauty, but rather of Norman or Teutonic than of oriental type. Yet there is nothing of the subdued expression of power which the subject invites; it is rather the face of a dreamer, of one lacking in moral force, in a word it is Christ estheticised rather than deified. In contrast with this is Max Bachman's plaster bust of "The Son of Man," its intent and earnest features of purely classic outline attenuated by the consuming soul within. Other works by this artist are his plaster bust of a young lady, and a bas-relief of Mrs Sheldon. Wesselhøft,

sends his "Titania and Bottom;" Anne Whitney, her "Roma," and Katherine Prescott, her "Joy to the New Year, Peace to the Old;" these and a few minor studies completing the list of what New England has to show in this direction.

"Christ and the Little Child," by Thomas Ball, is a marble group whose place is beneath the central dome. Both in conception and execution it differs widely from the delineations of the New England sculptors.

It is of the conven-



INTERNATIONAL ROTUNDA OF SCULPTURE

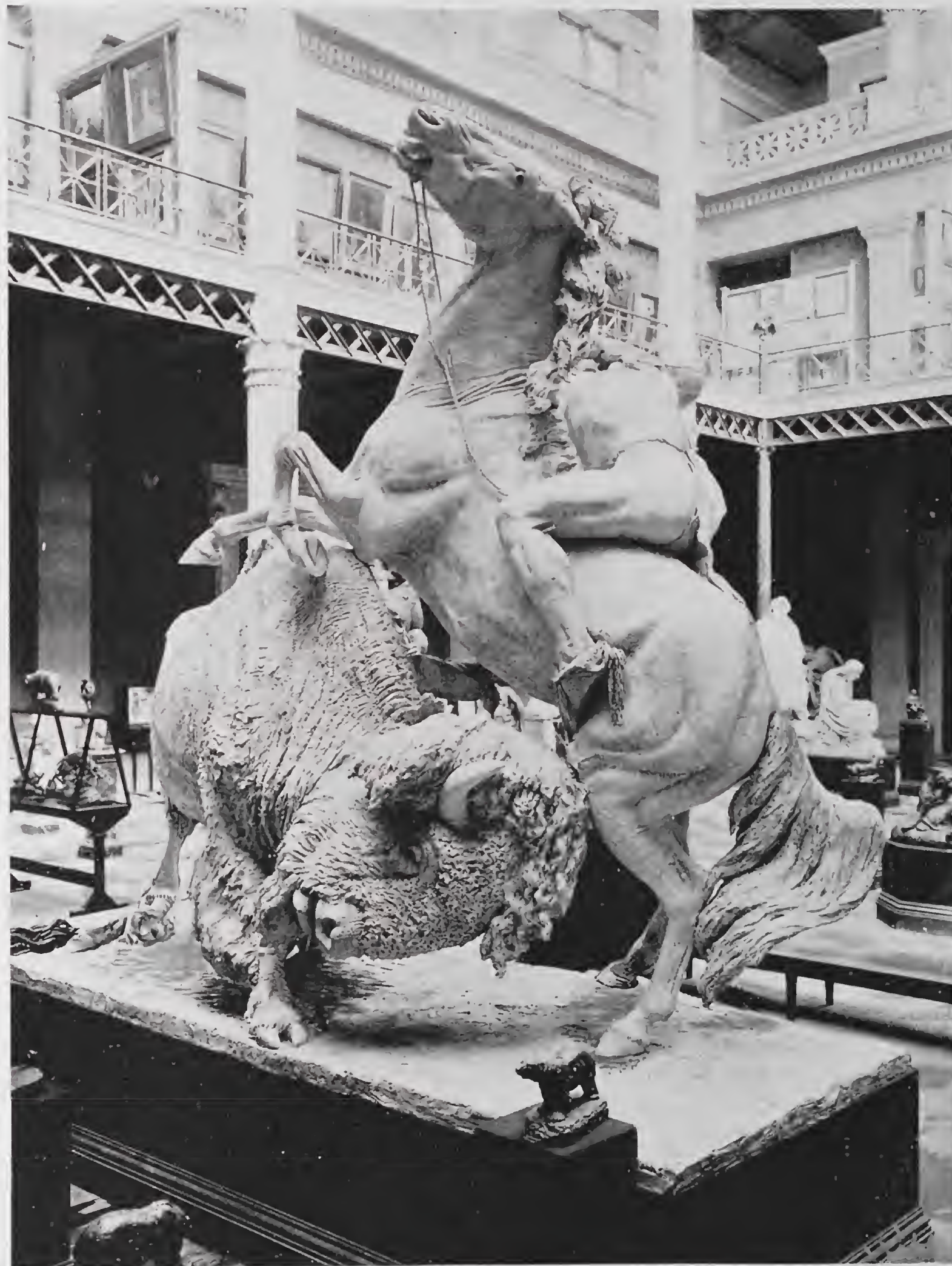
tional type, life size, but with little else of life in its cold, emotionless expression, cold as the marble of which it is wrought. As a study in what may be termed ecclesiastical statuary it is not without merit; but it has no other merit than this. Christ is supporting on a baluster the figure of the child, to which the left hand points in application of the gold-lettered text beneath: "Whoever, therefore, shall humble himself as this little child, the same is greatest in the kingdom of heaven." But there is no love in these serene and dignified features, and the lines of drapery and figure are stiff and

formal, precise, but almost with a mathematical precision. The same remark applies also to Ball's colossal bronze statue of Washington, and his equestrian statuette of Paul Revere.

A most vigorous composition is Gelert's "The Struggle for Work," representing three figures contending for a work ticket thrown from a factory window, with a woman and child at their feet. A brawny operative is holding aloft the ticket which a feeble and aged man is trying to wrest from his grasp, and on another side a sinewy youth is stretching his hand toward it. Admirable is the expression of pity for weakness and age mingled with satisfaction over the possession of a prize which means to him daily bread. The woman takes refuge between the feet of her husband, the central figure, holding in her arms a babe, which thus she saves from being crushed in the *mêlée*, while a boy is clutching him around the leg, himself in fear that this will be taken from him.

Paul W. Bartlett, well and favorably known for his small figures in marble and plaster, has a bust of his wife, and a medallion portrait of Doctor Skinner. In "Bohemian and Bears" and "The Ghost Dance," he shows what he can do with more ambitious themes. The former represents a Bohemian youth teaching a young bear to dance, with another cub enjoying himself, as bear-cubs will, by rolling on the ground. Its strongest feature is the expression of amusement in the young man's face while watching the clumsy antics of his pupil, and its puzzled look as it strives in vain to find out just what his master would have him to do. "The Ghost Dance," a study of the nude and by no means a pleasing study, shows the figure of an Indian balanced on one foot, with the other raised behind him, arms extended in front and hands hanging limp, wide-open mouth, and in the features an aspect of brutish ignorance mingled with the frenzy of superstition. The muscular treatment is perfect, each thew and sinew rendered with striking fidelity, so that we almost pity the model whose posing must have suggested to him that torture and the fine arts were somehow in close relation.

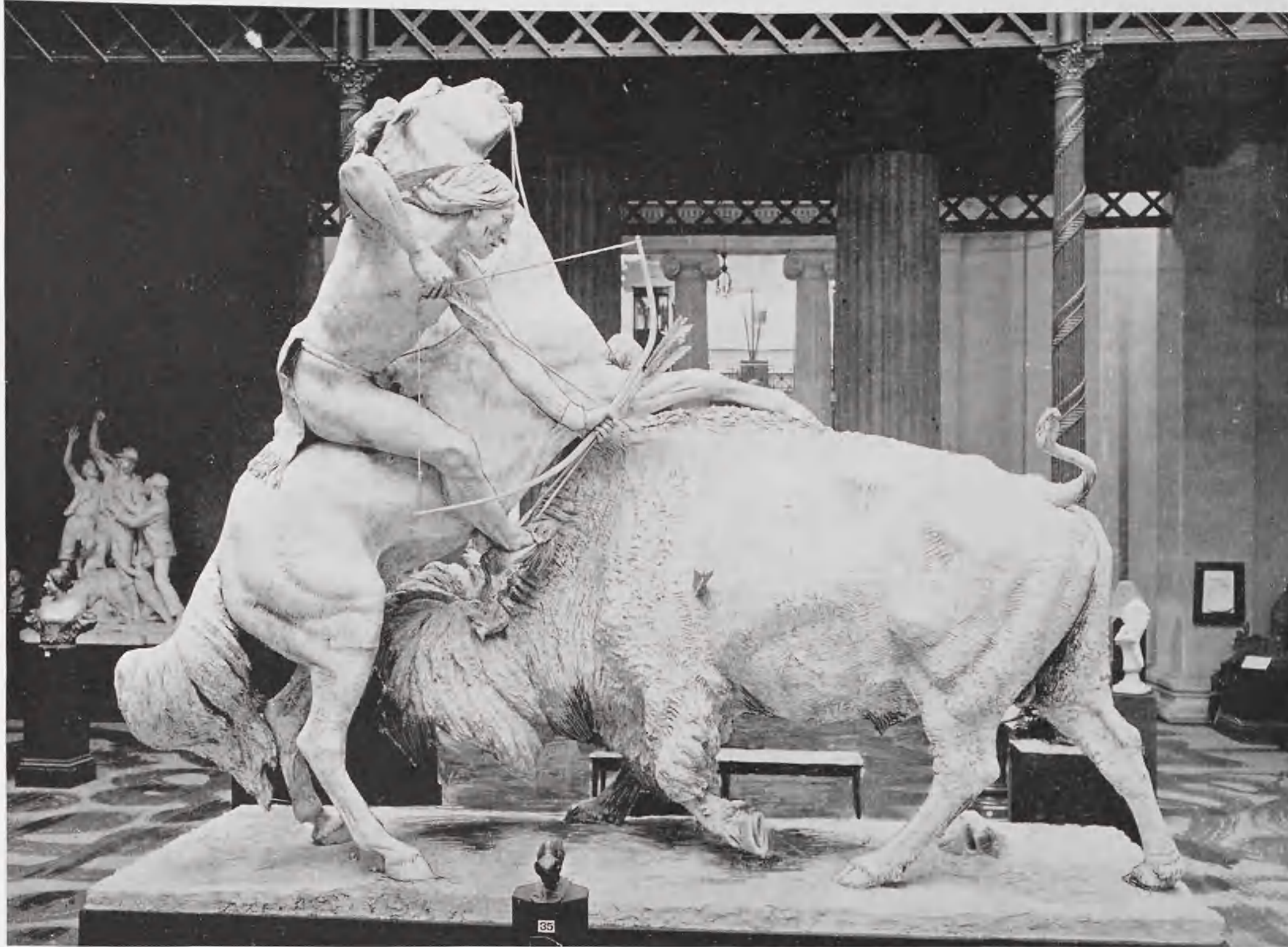
"The Young Sophocles Leading the Chorus of Victory After the Battle of Salamis," by John Donoghue, is of the French school, adapting modern treatment to studies of the antique. It is not an attractive composition, and is in more than questionable taste. True, that after the battle of Salamis he was chosen to head the chorus of boys at the celebration of that victory; but one cannot imagine the great dramatist posing, as a lad, nude, and with lyre in hand. Though lads went naked on such occasions, it is not the guise or attitude that one is apt to associate with this the great master of tragedy. The figure is well enough in its way, with erect and supple carriage, head thrown back, and earnest thoughtful features; but it is not suggestive of anyone in particular, and certainly not of Sophocles, either as a youth or at any other period of his life.



THE BUFFALO HUNT BUSH-BROWN



THE ART PALACE FROM THE SHORES OF THE NORTH LAGOON



THE BUFFALO HUNT. BUSH-BROWN

Bush-Brown sends his plaster group, "The Buffalo Hunt," one of the strongest compositions in plastic art displayed in the United States galleries. Triebel has several of his works on exhibition, one of the best of which is a marble statue of a young boy taking from the hook his first fish. Well portrayed is the expression of mingled delight and perplexity as he tries to hold on to his slippery, squirming prize. Tilden's figures of a young acrobat, a tired boxer, and a base-ball player are truthfully delineated; but the best of his compositions is the bronze group representing an Indian bear hunt, with the brute seizing the arm of his assailant and crushing it, bone, flesh, and sinew into a shapeless mass. Among other works of merit which cannot here be noticed in detail, are Adams' "Primavera" and "St Agnes Eve;" Brighurst's "Awakening of Spring," in terra cotta; Elwell's bronze group of Charles Dickens and Little Nell, and his marble group of Diana and the lion, symbolic of intellect controlling brute force; Rogers' plaster cast of Abraham Lincoln in seated posture; Ruckstuhl's "Evening;" Niehaus' "Athlete;" Wuertz' "Murmur of the Sea;" Dallin's portrait bust of Doctor Hamilton, and equestrian statue, "Signal of Peace," and a dozen of groups and figures by Edward Kemeys, most of them in animal sculpture.

Of painters in oil and water colors many were found worthy to represent New England art, and if among them a large proportion are as yet of



CHARLES DICKENS AND LITTLE NELL. ELWELL

only local repute, this does not detract from the merit of their works. First of all may be mentioned the pleasing and individual compositions of Edmund C. Tarbell, whose portraiture of face and figure, especially when taking for his theme the typical American girl, with her changing moods and fascinations, has won for him a foremost rank among American artists. "In the Orchard" is especially true to life, reproducing with breadth of expression and intense vivacity of coloring a summer scene where beneath orchard foliage is a group of comely maidens engaged in converse during an afternoon's repose. The picture is full of cheerful, wholesome life, of freedom from care, of smiles and sunshine. "Girl and Horse" by the same artist represents a young woman standing by the side of her saddle-horse as he drinks from a roadside watering trough. In "My Sister Lydia" is a portrait which shows to excellent advantage his skilful treatment and freedom of execution.

In different vein is the portraiture of Frank W. Benson, a Salem artist, whose "Portrait of a Lady in White" and "Girl with a Red Shawl" are greatly admired for their delicacy of style and purity of sentiment. I. H. Caliga, an acknowledged master of his art, is represented only by a full length portrait of a Brookline lady by whom it was loaned for exposition, and while not unworthy of its artificer, it is to be regretted that he did not send some of his more ideal conceptions. Of the four life size portraits by Frederick P. Vinton, his "Portrait of a Lady" is remarkable for vigor and realism of execution. In Mrs Lilla C. Perry's paintings are types of childhood, such as none but those who sympathize with children could depict. "The Doll's Bath," by J. H. Hatfield, is also a pleasing subject from child life, and in his "Letter from Papa" is an excellent specimen of drawing, though somewhat cloudy of hue. Among Frederick W. Freer's portraits, his "Lady in Black," loaned by the Boston Art club, is one of the gems in the New England collection. In Stacy Tolman's "The Etcher," which is something more than a portrait, is expressed with vivid effect the artist's concentration on his work. "Carnation and Black," by Joseph De Camp, though not without promise, is faulty as to coloring and in questionable taste.

Among Sargent's portraits are two of young children, one the son of the sculptor, St Gaudens, seated in a chair while listening to his mother's reading. In both is portrayed the true expression of childhood, and with the finest touch of this accomplished but somewhat variable artist. Less to be commended is his "Ellen Terry as Lady Macbeth," a full length picture of the great tragedienne in the act of placing the crown on her head. The pose is stiff and the features merely repulsive, without the sublimated expression of evil which the subject invites. Then there is too much blending of hues in the blue and green of the drapery and in the auburn hair, such drapery as Scotch women never wore, and with tresses belonging rather to the English type of womanhood. In other of his portraits Sargent is seen to better advantage, and shows himself well worthy of his rank as one of the foremost painters of the age.

Whistler's canvases are hung in the United States section, for he is a native of Lowell, and in this country were his earlier studies, though since thirty he has lived abroad, first in London and later in Paris. Notwithstanding Ruskin's adverse criticisms as to the works of this artist, there is but one opinion among more impartial judges, and that is that they rank among the first of their class. Of his six paintings two are portraits, remarkably suggestive of character and with excellent color scheme, giving emphasis to the more salient points while minor details are not neglected. "Nocturne, Valparaiso" is a beautiful night scene, with its graceful forms appearing indistinctly amid a delicate symphony of coloring. It is a tender, plaintive subject, musical in key to him whose ear is attuned to the music of art.

Thayer has two excellent portraits of a lady, and of a brother and sister together; but his best and largest painting is the "Virgin Enthroned," where the subject is treated with tenderness and spirituality. It is not in the conventional style, but in his own original vein, as best we like to see him; for Thayer never studied in the École des Beaux Arts, and had he done so it is doubtful whether he would have adopted its technique. So with Brush's madonna, which nevertheless is a beautiful picture to look upon, revealing all the joy and glory of motherhood, the perfect love and trust of childhood. Let those who are technicians and nothing more cavil at such work, for here are qualities that cannot be overlooked, and none the less valuable that they are not in imitation of the French; for of the French school, with so many of its defects and so few of its merits, there are enough and more than enough in these galleries of domestic art.

Much admired are J. M. Stone's "Leukopis" and "A Summer Dream," the former a half-length figure of a girl with the pure complexion and chiselled outline of feature which sometimes gives to the well favored among American damsels almost a classic mold. Both figures are somewhat scantily draped, with flesh tints



CORNER IN NORTH GALLERY

sufficiently pronounced, "A Summer Dream," representing a brown-haired maiden lost in reverie, and in reclining posture, with eyes half closed and slightly parted lips, one hand resting on her bosom and the other holding in her lap a cluster of roses. "Love Awakening Memory" and "The Annunciation" by Mrs M. L. Macomber are contributions that rise far above the mediocrity inseparable from large exhibitions. There is also noticeable an absence of the labored artificiality characteristic of religious and emblematic themes as portrayed by modern artists. Here rather is the stamp of an earnest individualism, with all the grace and delicacy of a woman's touch. A religious motif, but of another kind, is displayed in Frank H. Tompkins's "Good Friday," which illustrates in the figure of a woman kissing the crucifix one of the rites of the Bavarian catholic church; but a work more generally preferred is his "Mother and Child," an ideal expression of motherhood. Among Ernest L. Major's canvases, his "Saint Genevieve" depicts in the character of a shepherdess the patron saint of Paris.

"Charity" is the masterpiece among Walter Gay's productions, which also include as religious themes, "A Gregorian Chant," "A Mass in Brittany," and "Dominican Monk." "Charity" represents a group of aged peasantry, and a little girl receiving alms in the form of a breakfast of dry bread. The features are full of expression, and the light and color in perfect taste, gray and black costumes contrasting with warmer tones. Charles Sprague Pearce's "Village Funeral in Picardy" is a truthful composition, depicting in faithful and well



THE COMMUNION. MELCHERS

studied types a number of provincial dames seated outside a house of mourning, their garments as subdued in color as is their assumed expression of grief,—decorous, but without trace of real emotion. By the same artist are "Mother and Child," "The Annunciation," "The Shepherdess," and a couple of portraits, all showing the precision of style for which he is noted. In common with others whose works find a place in the United States galleries, Pearce is sojourning in foreign lands; for to the true artist there is no home save that of his art, and many of those whom I have mentioned as American painters no longer reside in the land of their nativity.

"The Communion," by Gari Melchers, is a painting of remarkable individuality and strength. Worship is its theme, pure and reverent worship, a simple and trusting faith unclouded by the faintest shadow of doubt. The story is forcibly told, with dignity of expression and absolute truth and directness of treatment. For this and other of his works the artist has gathered about all the honors that European schools and salons have to offer, and that these honors have been worthily bestowed there is here sufficient evidence. His "Sermon," for instance, is full of sentiment, but without trace of sentimentality, of beauty and power without undue striving after effect, and if there is also realism, it is an unconscious and not over-studied realism. The scene represents a number of Dutch peasants, most of them women, listening to a sermon in a village church, and that it is a lengthy sermon may be inferred from the fact that one of them has fallen asleep. There is nothing beautiful about these women, and there is nothing very remarkable, except that they are thoroughly Dutch and thoroughly devout women; but their faces are full of character and meaning portrayed with a master's touch. And so

with his "Pilots," where men are seated around a table in an upper chamber of an inn, whence is a view of red-tiled roofs and the blue sea beyond. They are merely talking and smoking, except for one who is at work on a model of a ship; but there is a wealth of character in these rugged features, in which one may see at a glance what manner of men they are.

In "Married" and "Skaters" by this artist are traces of the French school, but only as to coloring, in which he never goes to an extreme. A young Dutch peasant is walking proudly and with uplifted head, as though thankful for the blessing at his side, a young woman with downcast eyes, but none the less proud and thankful, as it seems, that her love has been requited. "Skaters" is a love scene amid ice and snow, but with a warm and cheerful home waiting to receive the maiden and her swain with genuine Dutch hospitality. In still another key is "The Nativity," where the subject is treated in original vein. In a stable lies the newborn infant, the mother resting her head on the father's shoulder. It is daybreak and soon the shepherds will be here, and the wise men and the kings; but there is no suggestion of the supernatural, not even a halo,



BREAKING HOME TIES. HOVENDEN

By permission of C. C. C. C.

though with a peculiar light around the child, while the rapt expression in Joseph's face suggests only the mystery that always possesses him who first becomes a parent. The story of the nativity is told, but told in a style very different to that of the older masters.

Among paintings that are the theme of general comment is Carl Marr's "Flagellants," exhibited in many a European salon before it found its way to Jackson park. The procession of the flagellants, it is said, dates back to the days of Saint Anthony, and in the thirteenth and fourteenth centuries spread throughout southern Europe, where the devout, with vigorous self scourging, weeping, and groaning, hoped to obtain the deliverance from war and pestilence which their prayers had failed to afford. Such is one of the scenes that Marr describes, with literary as well as pictorial fidelity to truth. The canvas is of mammoth size, and yet it is almost crowded with figures, most of them stripped to the waist, as they pass in procession a cathedral in northern Italy, where some turn aside and others go on their way in a frenzy of fanatical enthusiasm. Old men and children are here, and in the foreground a child is being carried in a litter, with maidens fair of aspect lustily applying the knotted lash to naked backs and shoulders. Notwithstanding its repulsive theme, one cannot but admire this composition for its drawing and coloring, and especially for the grouping of figures and faces, each of which, when viewed at a proper distance, is of itself a study.

"Breaking Home Ties," by Thomas Hovenden, is one of the few works of merit whose theme is descriptive of American life; for as I have said the United States galleries are crowded with depictions of foreign scenes

and incidents, to the exclusion of the rich and varied subjects which the artist might have selected almost without stepping from his door. It is a simple and touching story of New England life in days not long gone by. In the "living room" of an old-fashioned farm house, a mother with sad and anxious look is taking leave of her son, who bravely struggles to mask his home-sick longing and lingering. Near by are his sisters and his father, the latter carrying his carpet bag, and in the background his dog. The members of the family have just risen from the last meal which for a time they will take together, and the table is set with the quaintest

of china ware, the ingrain carpet and the straight high-backed chairs completing a picture which the New Englander knows so well and loves so well to see.

On two of C. Y. Turner's canvases are described the oft-told stories of John Alden's letter and the courtship of Miles Standish, both familiar to the public in reproductive etchings. In the former the puritan captain is standing in front of the fireplace, bethinking him how to indite his tale of love to the bashful scribe who is acting as his amanuensis. In the other John is pleading his rival's cause with downcast look. He is seated as far away from Priscilla as space will permit, and yet not far enough, it seems, for he is the very picture of embarrassment. The maiden is at her spinning wheel, over which her head is demurely bent, for she is not yet ready to utter the words which Longfellow puts into her mouth: "Why don't you speak for yourself, John?" The story is told exceeding well, and the entire composition, with all its accessories, is full of the atmosphere of New England life. Another of Turner's New England scenes is "The Days that Are No More," where a young widow is leading her little girl from the graveyard where her husband sleeps. She is moving slowly and reluctantly, trying in vain to stifle her sobs, as she goes forth alone with her child to take up the weary life that must still be lived, without the strong arm and loving heart that are laid forever at rest.

McEwen's "Witches" deals with a tragic incident in New England annals. The scene is at Salem, where, manacled in her prison cell, stands a beautiful girl confronting the executioners who are about to lead her to her doom. A withered hag is leaning toward her with uncanny



CIVILIZATION. MAYNARD

leer, for she also has been condemned, and takes comfort in the thought that this fair young life will be crushed out before her own. In the central figure is an expression of pain and surprise but not of terror, for she will meet her fate with dignified resignation, as the victim of superstition or perchance of jealousy, prompting some rival to bear false witness against her. Excellent is the light effect from a window in the background, encircling the maiden's head as with a martyr's halo. In "The Absent One" is a similar play of light in a Dutch interior, where on All Souls' day a young woman is reading to her father from holy writ the passages that tell of the life to come, upon which already his wife has entered. Other works by this artist are "Telling Ghost Stories" and "Judgment of Paris;" but rather would we have had more of his domestic themes.

"The Bathers," by Alexander Harrison, represents a number of women, in the water or on the sand, beckoning to each other and enjoying themselves to their hearts' content in nature's garb and in communion with nature. The coloring is excellent, especially that of the water, for in his rendition of moving waters and the play of light upon them Harrison has no superior. It is this quality also that has given to his "Crepuscle" a wide celebrity. Beautiful is the glow of the setting sun reflected from the tranquil waves, whose aspect



THE WINDOW SEAT

From painting in oil by F. D. Millet

suggests the majesty of ocean even in its restful mood. These gently curling billows and the foam that crests them seem to be permeated with light, an effect most difficult to produce, and which can only be accomplished by a master of his art. "En Arcadie," pronounced by an able critic one of the best works of the "plein air" school, is a picture of a forest glade peopled by fairies, whose forms are bathed in a soft

golden atmosphere of sunlight glancing through the trees. Here again the light and air are perfect; but as with his other compositions, the figures are somewhat lacking in grace and refinement.

"A Surprise," by Birge Harrison, has for its scene the forest of Compiègne in autumn tide, the ground covered with russet leaves, of which only a few remain on the branches above. A peasant girl is gathering wood, and glancing upward for a moment sees an antlered stag within a few rods of where she stands. They are looking at each other, and admirable is the expression of astonishment and fear in the face of each, for both girl and stag are thoroughly alarmed, and a moment later will be running from each other as fast



POMONA. MAYNARD

as their limbs will carry them. In "The Return of the Mayflower" a puritan maiden is gazing intently at the approaching vessel, on board of which is her lover. She is a comely damsel, though with features worn with sickness and suffering, love sickness it may be, for their expression is of tender, earnest longing, of impatience that can barely wait until the ship shall reach its haven.

Of the eight canvases from the brush of F. D. Millet his "Window Seat" is one of the best illustrations of his effective and scholarly style. It is a simple story simply told, with sufficient detail and a happy combination of quiet, restful colors. George W. Maynard, by whom is an excellent portrait of Millet, is also noted for harmony of coloring and strength of delineation, as is observed in his "Pomona" and "Civilization," the latter a dignified interpretation of its title. "A Card Trick," one of J. G. Brown's contributions, and "Soap Bubbles," by Elizabeth Gardner are also among the pictures that tell their own tale, the facial expression in both being admirably rendered. "A Dream," one of the smallest of Charles C. Curran's canvases, represents a number of fairy-like forms grouped around a soap bubble radiant with prismatic hues. In "Night Market, Morocco," by Thomas S. Clarke, the scene, except for its Moorish figures, might have been in any city where peddlers hawk their goods amid the flare of smoking torches. William Keith and Toby Rosenthal are among those who represent California art, the former with his "Autumn Sunset" and the latter with "A Dancing Lesson of our Grandmothers," a study full of life and action and with evidence of his well-known skill in drawing and coloring. But Pacific coast art was seen to better advantage in the state buildings, and is seen to still better advantage in the Midwinter Fair in San Francisco.



A CARD TRICK. BROWN

Of Tryon's thirteen landscapes all but two are loaned by their purchasers, and in each is the refinement and delicacy of touch characteristic of this popular artist. More pleasing than powerful, they are for the most



SOAP BUBBLES

From painting in oil by Elizabeth Gardner

part in minor key, with effects of early morn and evening light, of spring and autumn tide, of the rising moon and the setting sun. Similar in technique, though differing widely as to general results, are Murphy's "November Grays" and the "Hazy Morn." In contrast with these, and not for their merit, but as samples of the impressionist paintings of the purple and lilac school which disfigure the walls of these galleries, may be mentioned Twachtman's canvases, one of which is aptly styled a "Decorative Landscape," decorated that is with the all-pervading hues of purple and lilac, relieved here and there by a dash of vermillion or a streak of yellow and white. Not that I would pronounce a sweeping condemnation on all painters of this class, for Corot and Daubigny were impressionists, as are many of the most gifted of American artists; but they are not of the purple and lilac school. One may paint a scene, as at the moment it impresses him, without orange-colored grass or foliage, and without shrouding waters, hills, and plains in filaments of gauze. It is mainly this striving after atmospheric effect at the expense of form and texture that makes such depictions seem blurred and dim, their figures flat, and the entire composition a counterfeit resemblance of its subject. Such paintings may be well enough as artistic fantasies, but they are not as nature paints.

Twachtman's compositions are by no means the most pronounced of the ultra-impressionist school, and viewed at a proper distance his landscapes are not without their attractive features. More striking examples, for



A DANCING LESSON OF OUR GRANDMOTHERS. ROSENTHAL

instance, will be found in Vonnoh's canvases, and especially in his "Duxbury Bay," with its gaudy, disintegrated coloring; in Dannat's bold looking "Spanish Women," and in Reid's "Vision of Saint Angela d' Agnant," where, though the figure is skilfully drawn, we cannot tell whether the crepuscular light which surrounds it is that of early morn or eve. To the same class belong, among others, Pearce's "Annunciation" and Du Mond's "Christ and the Fishermen," both painted in modern style. In contrast with these is Blashfield's, "Christmas Chimes," with its ideal and somewhat daring treatment, yet in perfect harmony with the subject.

To return to landscape scenes may here be mentioned those of John J. Enneking, who with Tarbell, Vinton, and Thomas Allen, all represented in the New England collection, was appointed to the Massachusetts jury of selection on paintings in oil. While in all of Enneking's canvases is fully justified his high repute as an artist true to nature, perhaps in his "October Twilight in New England" is the most striking expression of his power. Through a bare network of boughs is depicted with remarkable depth and warmth of coloring a golden sunset scene, with foreground of grayish rock, moss-covered and fringed with autumnal leaves. Other of Enneking's works are "Autumn Afternoon," "November," "Salting Sheep," and "South Duxbury Clam Digger." Of the canvases of Charles H. Davis "Abandoned" shows to excellent advantage his subdued and scholarly style. The scene is a deserted farm house, its crumbling walls and desolate environment in keeping with the sentiment of the theme. In all the paintings of this artist may be noticed a certain gravity of tone and expression, an absence of strong coloring or striking contrasts of light and shade. By those whom such

things please he has been accused of dullness and monotony of treatment; but one turns with a sense of relief from the sensationalism all too common in American art to the repose and refinement of these dignified compositions.

A powerful, if somewhat trist and melancholy scene, is Charles H. Woodbury's "North Sea Dunes," showing a wilderness of sand hills thrown up in unnumbered æons by the ceaseless action of wind and wave. Here is the very genius of desolation, the sketch being taken from the landward side, and with Lilliputian figures of peasant women contrasting with the gigantesque proportions of the dunes. In other vein is Woodbury's "Tide River," with its breadth of treatment and richness of coloring. A pleasing combination of landscape and genre painting is Knight's

"Hailing the Ferry," a loan from the Pennsylvania academy of fine arts. "Moonrise," by Thomas Allen, is a well conceived and executed composition, full of repose and tranquillity, one in which the stillness and intangible hues of twilight have been rendered by a master's hand. Of the four paintings by D. J. Elwell, "Moonlight at Domburg, Zeeland" was executed while a student at the Antwerp academy. Its weird and sombre tones, suggesting rather than portraying an almost invisible landscape, at once established his reputation among Belgian critics when displayed at the Cercle Artistique.

A prominent rank among marine painters is conceded to William G. Norton, among whose works the "Return of the Herring Fleet" is worthy of special note. The scene is on the coast of Holland, where a number of fishing smacks, roomy and broad of beam, are running under full sail toward the beach. Awaiting them is a group of figures essentially Dutch as to feature, figure, and costume. The picture is full of color, life, and motion, the sky filled with swirling clouds and the sea of the dingy cream color peculiar to the coast, changing to a light blue as the horizon is approached. "Rhode Island Coast" is a faithful and unpretentious study by W. Whittredge, by whom also are "The Plains" and "The Old Hunting Ground," both of them loan contributions. "The Seiners' Return" and "The Open Sea," by Walter L. Dean, are in the best vein of this well known artist, the former especially, with its depth of space and vitality of color, showing thorough familiarity with the details of his craft. A more ambitious work rep-



CHRISTMAS CHIMES. BLASHFIELD

resents, under the somewhat inappropriate title of "Peace," the white squadron of our navy anchored in Boston harbor. Unless it be for a New Bedford whaler there is no more unsightly craft than a modern iron-clad, and worthy of all praise is the skill which has given to these frowning leviathans of war an element of the picturesque, grouped as they are in placid waters and under a summer sky. This picture, it may here be mentioned, is the largest of its class, nine feet in length by more than six in width. "Danger Ahead," by Albert H. Munsell, represents the bow of an ocean steamer running at full speed toward the on-looker, who to grasp the realism of the scene must imagine himself on board a vessel lying in her path and in imminent danger of collision. In contrast with this may be mentioned Jules L. Stewart's sketch, "On the Yacht *Namouna*."

Military subjects are but slightly represented. One of the smallest and best among them is "Driven Back," by De Cost Smith, whose time has been largely devoted to the study of Indian life. It represents a party of Sioux warriors emerging from a river by which they are separated from a pursuing squadron of cavalry.

"Charging a Battery" and "Silenced" are from the brush of Gilbert Gaul. "An Innocent Victim," portraying an episode in the Franco-Prussian campaign, is by Seymour Thomas, who appears to have gone far afield in search of inspiration, while neglecting the stirring incidents of the civil war. Among the engravings, etchings, and drawings are also a few illustrations of soldier life.

Water colors are plentiful in the United States galleries, forming a copious but not a very comprehensive exhibition; for several of the leading masters, such men for instance as John Lafarge, are here without representation. Among the best of the landscapes and sketches are Minor's "Moonlight;" Mente's "Evening Pastoral;" Ochtman's "Frost;" Eaton's "Autumnal" and "Indian Summer;" Cabot's "Wind-Swept Beeches, Naushon Island;" Pierce's "New England Pasture;" Fidelia Bridges' "In an Old Orchard;" Hallett's "Winter Moonlight;" Hardwick's "Looking Inland;" Alice Stackpole's "Late Afternoon in Beverley," and Fanny W. Tewksbury's "New England Homestead." "Portal of Ruined Mission, San José, Texas," is by Thomas Allen, who in common with several others is also represented in the collection of oil paintings. Among other architectural themes are Blaney's "Temple of Neptune;" Rotch's "Limburg Cathedral," and Colman's "Mosque" and "Ruins of a Mosque," at Tlemcen, Algeria.

"A Sioux Camp,"

"Mountain Trail," and "Got

Him," are by Henry F. Farny,

the last illustrating a mode of

dealing with the Indian ques-

tion which should commend

him to the notice of the

government. F. Hopkinson

Smith has four of his can-

vases, among which are "The

Rialto" and "Venetian Fish-

ing Boats." Edwards sends

"An Interesting Subject" and

"In the Dunes, Flanders,"

both of them somewhat broad

in style. Abbey's "Mariana,"

a study from *Measure for*

Measure, was recently ex-

hibited at the New York

academy of arts. Clara T.

McChesney's "Still Life" and

"The Old Cobbler" are sug-

gestive of the Dutch school.

Of the three canvases by Rhoda Holmes Nicholls' "The Scarlet Letter" is specially to be commended. Pleasing studies also are Church's "Pandora;" Hassam's "Fifth Avenue" and "Springtime in the City;" Guerin's early morning scene in a village street in Kentucky, and Smedley's contributions, several of them relating to the Exposition grounds and buildings. So also are Turner's "Flood Tide;" Richards' "An Atlantic Beach;" Silsbee's "Monadnock;" Ellen S. Dixey's "Dresden in January;" Rosina Sherwood's "September;" McIlhenny's "Old Friends;" and Kathleen H. Greator's "Carnival." While in these and other works the American school is fairly represented, it must be admitted that the galleries devoted to domestic art appear to better advantage in oil paintings than in the lighter medium of composition.

In etchings may first be mentioned the works of James McNeill Whistler, one of the most finished etchers since the days of Rembrandt, and one of the few who have achieved a world-wide repute in two important branches of art. In his etchings, as in his paintings, the merit is not only in what he puts into them but in what he leaves out, seizing on the central points of interest and giving them suitable emphasis, yet with a sufficiency of detail in subordination to the general effect. In proof of the esteem in which he is held, it may here be mentioned that of the works exhibited in this collection, not one is from his own studio, all of them coming as loans from many cities and from many owners; but as they are three-score in number, touching on a great variety of subjects, they cannot here be reviewed in detail. Stephen Parrish, Charles A. Platt, J. Alden Weir, Alexander Schilling, Charles A. Vanderhoof, Charles F. W. Mielatz, and Mary Nimmo Moran are also liberally represented among the more prominent etchers of original themes.

In engravings, and especially in wood engravings, a leading rank is conceded to American artists, the highest honors at the Paris Exposition of 1889 being conferred on a Massachusetts wood engraver, with minor awards to others of his craft. From this artist, whose name is Elbridge Kingsley, is a choice collection of prints, several of them reproducing the works of acknowledged masters. Portraiture, landscape, marine views,



HAILING THE FERRY. KNIGHT

historical subjects, and works in lighter vein are well represented in this department. Among the best of them is the portrait of Jean Baptiste Corot, by M. Lamont Brown, reproducing with singular fidelity and clearness of outline the well-known features of the great landscape painter. W. B. Closson has one of the largest and most valuable exhibits, several of his wood engravings produced by a method of his own invention, the nature of which is still a secret, but of which it may be said that the work is largely done by hand, and has no relation to photo-mechanical processes. All his specimens are of the highest class, representing such masters as Rembrandt, Murillo, Jean François Millet, Bonvin, George Fuller, and A. H. Thayer. William J. Dana has landscape studies after Corot and Appleton Brown. Of excellent workmanship are William P. Cleaves' engravings whose themes are mainly taken from White Mountain scenery. Prominent among the marine views is the "Ship in the Fog," by Harry E. Sylvester, whose prints are also illustrative of church and cathedral architecture.

As loans from a New York publishing company are a number of works by Timother Cole after Michael Angelo, Raphael, Paul Veronese, and other Italian masters. These are not only among the best engravings



RHODE ISLAND COAST, WHITTREDGE

in the art display but among the best of modern times. Frank French has studies after Martiny, Barye, Fortuny, and others, together with original compositions. Thomas Johnson is strong in portraiture and figures, as also are Henry Wolf and Gustav Kruell. John P. Davis, Francis S. King, H. F. W. Lyouns, and Caroline A. Powell are represented by a variety of themes. In a steel engraving by S. A. Schoff is a marine subject after De Haas, with a copy of Rowse's well known portrait of Emerson.

Of pastel drawings the collection is larger than in any of the foreign sections; but in the United States as elsewhere, except perhaps in France, this medium is seldom employed and rarely to good effect. Of the famous New York Pastel club only one of its prominent members is represented, and that one by a single contribution—"Good Friends," by William M. Chase. Appleton Brown has several landscapes; Jules L. Stewart, Jacob Wagner, Cecilia Beaux, and Anna E. Klumpke have each a portrait; Caroline F. Hecker, a couple of flower pieces; Adelaide Wadsworth, a Venetian scene; Birge Harrison, "Evening on the Seine;" Charles A. Corwin, "Oat Harvest;" and Julius Rolshoven and other skilful pastellists are represented by various subjects.

Of pen, charcoal, and other drawings there is a large collection of excellent quality, one to which the only exception that can be taken is to its size. C. D. Gibson, for instance, has no less than six and thirty pen-drawings on exhibition, together with three wash-drawings. All of them are of unquestionable merit; but if this eminent artist had sent only a few of his best, I cannot but think he would have appeared to better advantage. By Abbey are fourteen Shakespearian illustrations. Pennell and Fenn's liberal contributions relate almost entirely to architecture. Pyle deals largely with landscapes; Blum, with Japanese, and Castaigne, with



ON THE YACHT "NAMOUNA." STEWART

Provençal scenes. Reinhart's charcoals are among the best of their class, especially his portrait of Charles Dudley Warner. Remington inclines to animal and military themes, and Smedley's drawings cover a wide range of subjects. The Boston school is represented by Woodbury, Small, and Attwood; but in this department as well as in engravings and etchings, some of the most prominent names are omitted from the list of New England contributors; nor are these branches here so much in favor as in New York and Philadelphia.

In architecture in connection with the fine arts, New England appears to excellent advantage, as might be expected from a country which contains among its citizens some of the

foremost members of the profession. In monumental and city architecture Boston has almost created a school of its own, though as yet its works may not be fully appreciated, for men have become so accustomed to faulty architecture that they cannot readily accept designs of a superior type. While not original, except for the originality which combines old forms with new compositions, the members of this school have discarded all obtrusive and fantastic elements, reproducing without servile imitation the classic features of earlier days, so far as they can be adapted to modern conditions. If we are to have in this country a renaissance of architecture, it is probable that Boston will be its birthplace, while the dawn of that renaissance may possibly have been forecast in the ephemeral city of the Fair.

The best display of architecture as a fine art is in the Exposition buildings themselves, two of which, apart from state structures are, as I have said, from the designs of Boston artificers. By the firm of Peabody and Stearns, to whom were intrusted the plans for Machinery hall, is exhibited a sketch of its southern portal, with office sketches, all in water colors. From Edmund M. Wheelwright, city architect of Boston, are several designs for public edifices, showing the purity and symmetry of proportion characteristic of his compositions. Of special



AN INNOCENT VICTIM. THOMAS



MOUNTAIN TRAIL. FARNY

interest are Longfellow, Alden, and Harlow's designs in photograph for the Carnegie library and music hall at Pittsburg, and the city hall at Cambridge. Church, school, and college architecture find expression in drawings from Walker and Kimball; Andrews, Jacques, and Rantoul; Cram, Wentworth, and Goodhue, and the water colors of Sturgis and Cabot, the first of these firms also showing its plans for the Omaha public library and telephone exchange. Of the three water colors shown by Julius A. Schweinfurth, one is a competitive design for the American Fine Arts society's building in New York. From Arthur W. Wheelwright is also a suggestion

for a school of fine arts in connection with a university. H. L. Warren has several handsome compositions, one for a conservatory of music as an appendage to a female seminary, and others for the orphan asylum at Troy, built from his plans. Nearly all the larger cities of the United States, and not a few of the smaller ones, find expression in these galleries, with plans in every style and for every conceivable purpose; but as they are nearly 300 in number I cannot here present them in review.

An interesting feature in the galleries of domestic art is the retrospective exhibit of American paintings, some of them dating far back into the eighteenth century, and consisting largely of portraiture, though covering a variety of themes. The oldest of all is a picture of Bishop Berkeley and his family, painted by John Smybert in 1729. This is the property of Yale university, and is said to be the first canvas from the brush of an American artist containing more than a single figure. Of George and Martha Washington there are portraits executed between 1790 and 1792, with one of Jonathan Warner in 1761, of David Garrick in 1772, of



MOONLIGHT ON GRAND BASIN

Counsellor Dunn in 1795, and of members of the Dana family depicted in the closing years of the century. There are landscapes painted as early as 1810; there is an Indian scene in northern Texas the date of which is 1833; and about this time began to appear more ambitious subjects, as Allston's "Paul and Silas in Prison" and his "Danae and the Shower of Gold." Thus the collection is continued until it touches on the sphere of contemporary art.

But the centre of interest in the entire art display is the loan collection of foreign works contributed by their owners throughout the United States. This is officially styled a collection of foreign masterpieces, and such in part it is; but among these masterpieces are many inferior pictures masquerading under that title and many others which, though first-class paintings by artists of acknowledged merit, cannot properly be classed as masterpieces. Rather should it be termed an exhibition of the control which French art has acquired over American collectors and connoisseurs; for of its 126 specimens about three-fourths are French, most of the remainder coming from Dutch and English studios. A serious defect in these chambers is the grouping; and this is the more to be regretted that here was supposed to be the finishing touch of the art display, the brightest jewel in the artistic crown of the Columbian Exposition. The arrangement shows neither scale, proportion, symmetry, nor even due attention to the first principles of classification, some of the largest and smallest paintings hanging side by side, and with little regard to quality or subject. Thus Corot's "Orpheus" was placed in close proximity to the most daring studies of the nude, and Daubigny's "Cooper's Shop" hung next to a portrait of Madame Modjeska by Carolus-Duran. Here and there, however, the combination is better.

as in one of the chambers where side by side are the smaller works of Millet and Meissonier, Daubigny, Corot, and Theodore Rousseau.

Of the twelve paintings by Corot, each is a masterpiece, and yet all are different, not only showing the versatility of the great landscape painter, but explaining his potent influence as a factor in the history of art. From 1827, when his first picture was hung in the salon exhibition, until the time of his death in 1875, his works were never absent from its walls, and however important were the works themselves, they were far more important as lessons in contemporary art, as developing antecedent tendencies and pointing the way to a more faithful rendition of nature's truths. By those who have misconceived his style it is alleged that he merely

idealized nature, that in his softly intoned effects of foliage and light he suppressed many details which he did not or would not observe. Rather should it be said that he separated from its minor features the central idea which he intended to convey. As one of his biographers remarks: "What he wanted to repeat was not nature's statistics, but their sum total; not her minutiae, but the result she had wrought with them; not the elements with which she had built up a landscape, but the landscape itself, as his eye had embraced and his soul had felt it. 'Truth,' he declared, 'was the first thing in art and the second and the third.' But the whole truth cannot be told at once. You can-



THE MAN WITH THE HOE. MILLET

not paint summer and winter in a single canvas. Not even two successive hours of a summer's day are exactly alike, and you cannot paint them both." Certain it is that no man worked harder at his task, with more earnest conscientious study, long unrequited even by the scantiest recompense. At thirty he lived on a pension of \$300 a year which his father allowed him; at fifty this pension was doubled and still formed his only income; at sixty he had not sold a single picture, except to his brother artists. "Alas," he cried, as the first of his patrons carried away his purchase from the studio, "my collection has been so long complete, and now it is broken."

"Orpheus," with its strong and yet delicate rendering, is one of the most idyllic of landscapes, and in the highest style of classic art. The god of the lyre is greeting the morn, whose soft roseate colors are painted on a crystal sky as only Corot could paint them, and with the sombre tones of the foreground in perfect contrast. Almost beneath the shade of a stately tree whose foliage is tremulous with light, stands the figure of the great musician, his touch giving emphasis to the harmony of the scene, so that nature herself appears to listen. It is impossible to imagine a more beautiful conception or one more delicately executed. Here is the poetry of art, nature's own poetry, interpreted and accented by the touch of a master who was himself in closest communion with nature.

"Evening" is in another mood, with radiant sunset sky, whose glow is even on the shadows of the trees beneath which, their figures bathed in the mellow light, maidens dance to the low soft music of foliage attuned by the zephyr's breath. A second picture bearing this title, together with his "Landscape," "The Path to the Village," and other canvases represent different styles and periods in the life-work of Corot. But a stronger contrast than any is in "The Flight from Sodom," a work in which there is a wide departure from his usual mode of treatment. The landscape is here a subordinate feature, the figures grouped in the foreground forming the objective point of the composition. Lot and his family are well delineated, with suggestion of rapid flight from the devoted city on which his wife is gazing with fatal indecision, hoping perhaps that its doom may not involve the destruction of her home. "Danse des Nymphes" is a beautiful combination of landscape and figure painting, second only to his "Danse des Amours," the former with graceful buoyant figures grouped around a classic

temple buried in the woods, representing an ideal world with its fair suggestions of infinite joy and peace. "Environs of Ville d'Avray" is a study from the neighborhood where most of his days were passed, and whose summer foliage amid the soft evening light he loved so well to paint. Here he lived alone with art and nature, for he never married, taking in place of wife, as he said, "a little fairy called Imagination, who came at his call and vanished when he did not need her."

With the name of Corot that of Charles Francois Daubigny will ever be associated, not only as intimate friends, but as leaders of the school which delivered art from the barren conventionalism of the pseudo-classic period, and carried it far into the domain of reality and truth. Their style had much in common, though in both was marked individuality, Corot having more of sentiment in his works, throwing into them his own poetic imagery, while Daubigny aimed rather at reproducing the impression of the moment in all its freshness of form and coloring. Both were preëminent as landscape and figure painters, and both were more than that, their range extending to many subjects, all of them treated with the strength and beauty of touch which rank them among the classic masters of the age.

"The Banks of the Oise at Auvers," in the loan collection, was exhibited at the salon in 1863, and is one of several themes portraying under various aspects the scenic beauties of this stately river, with its broad and fertile valley. "Boat on the River Oise," hung in the salon of 1851, was one of the works which made his fame. For his "Banks of the Oise," displayed in 1859 was awarded the legion of honor, and still another is "The Banks of the Oise near Bonneville," which graced the salon of 1866. It was in the former year that Daubigny, wearied of following the stream afoot, and sleeping at hotels to catch his sunrise effects, bethought him of building a studio-boat with cabin in the stern which served as workshop, bedroom, and kitchen. This he christened the *Botin*, and in his little craft voyaged at will along the Oise and Seine with their adjacent waters, where, free from care, he communed with nature, and produced those famous studies of river scenery and river life on which his fame so largely rests. The summer of 1876 he spent on the Normandy coast, and the result is seen in several of his later compositions, one of which is here exhibited under the title "Coast near Dieppe."

As with Corot, the contributions from the brush of Jean Francois Millet are histories of his art life, beginning back in the days when a Boston connoisseur accorded to the then struggling exponent of the Barbizon school the recognition which his own countrymen persistently withheld. The price that was paid for the two-score of pictures which the Bostonian purchased from Millet, including some of his greatest works, it is not given to us to know; but we may be sure it was not much, for at this time they were almost unsalable. Parisians would have none of them, even as a gift, until the story of their sale was noised abroad, and not until many years afterward did they fully appreciate one of the foremost genre and landscape painters of the age.

Among his eight canvases in the loan collection, "After the Bath" is almost diminutive in size but large and strong in art. It is a study of the nude, as were most of his earlier works, until, as is said, the reading of a bible which his grandmother gave him when he left her to try his fortunes in Paris, caused him to exchange these subjects for the portrayal of peasant life. This is to be regretted, for in the undraped figure as Millet painted it, and as few else could paint it, there is nothing at which the most prudish could take offence. But we are more than recompensed in his later works, for here is a breadth of treatment and expression which won the hearts even of Parisian connoisseurs.



SONG OF THE LARK BRETON

Profound was the sensation created in the salons by his "Man with the Hoe." It is merely a peasant at his task in the field; but in this unpretentious theme is a wealth of suggestion. The man is of repulsive and almost brutish aspect, with uncouth, muscular frame and low, retreating brow, almost hidden beneath a shock of coarse, matted hair. He is panting for breath with open mouth and stooping form, as of a worn-out beast of burden, and in that face, bent over the hoe on which he leans for rest, there is no human expression, no trace of mind or soul. It is merely the face of an animal, and of a savage animal, goaded by toil and suffering. A more pleasing study, but a less powerful one, is "The Sheep-shearers" with a richness and warmth of coloring which is not always found in the canvases of Millet. "The Pig Killers" is one of the gems of the loan collection, as also is "Peasants Carrying a New-born Calf." Perfectly modelled are the figures of the cow

and the sturdy young peasants, with their play of limb and muscle, while as to coloring—here is another example of what Millet can do when the subject is in harmony with his mood.

Of the "Reconnaissance" and "View near Poissy," the latter a beautiful landscape with color scheme in light green tints, it need only here be said that they are by Meissonier. From Rousseau, who with Dupré, Diaz, Corot, and Huet, all but the last represented in this collection, began the good work which Daubigny took up, there are four of his landscape paintings, though none of them are quite at his best. Nevertheless in all of them, and especially in his "View on



THE SPY. DE NEUVILLE

the Seine" and "Landscape in Berry," there are evidences of the strong technique of the great master, whose pictures no one would have, for none could fathom, as he did, the depths of nature's mysteries. Diaz' subjects are "La Danse des Almées," "Turkish Women," and "The Descent of the Bohemians," while of Dupré's three canvases two are studies of the sea. In this connection though of a different school, may be mentioned Claude Monet's "Harbor of Havre," with its smiling waters and quaint, old-fashioned houses; his "Morning Fog," with its iridescent sea breaking on a dimly outlined cliff; his "Dawn on the Coast of the North Sea," with its pale crimson sunrise; and his "Snow Scene," with its bleak and desolate pathway. In all but the last the light is delicately intoned, giving to nature the soft, dreamy aspect in which she is seen at her best.

In his "Odalisque" and his portrait of Modjeska Carolus-Duran appears at a disadvantage as compared with his paintings in the French section. Rosa Bonheur is well represented in her "Pastoral" and "Sheep," especially in the latter, with its fleecy clouds, in a clear blue sky, and its play of sunlight and shadow. While not among her more ambitious canvases, they are by no means unworthy of her brush. Cazin has four of his studies, among which "The Expulsion from Paradise" is depicted with startling realism. "Tiger Quenching his Thirst" and "Turks Abducting a Girl" are in the well known style of Eugène Delacroix, whose works too often border on the extravagant and sometimes on the grotesque. In his "Christ at the Tomb" the tragic elements are portrayed for all they are worth. There are the stains of blood, the pallid hue of death, the unspeakable agony, and around all the awesome gloom of the sepulchre.

Of the three Raffaellis here exhibited, "Absinthe Drinkers" represents two wrecks of Parisian humanity in the shabbiest of apparel, unkempt, unwashed, unshaven, with hardly a trace of the human in their sodden and ghastly features. They are seated at a table against the bare white wall of a café, and at the side of either a slender glass, filled with a pale yellow liquid, tells the tale of wrecked and hopeless lives. L'Hermitte's "Washerwomen on the Banks of the Marne" is resplendent with sunlight hues; Lefebvre's "La Cigale" is in his most imaginative vein; "Nymphs Bathing," by Monticelli, is remarkable for its coloring, its strains resembling the lacquer paintings limned on old cabinet work. Jules Breton's "Song of the Lark" shows the face of a peasant girl raised in wonderment at the sweet music overhead. In his "Colza-gatherers" the laborers are hard at work over their task, all save one who gazes for a moment on the glories of a summer day. A work of exceptional power and character is "The Spy," by Alphonse-Marie de Neuville. Near a table where a group of German officers are taking their evening meal, a Frenchman, disguised as a hunter, is being searched for papers that will doom him to a shameful death.

In Manet's "Dead Trocador" are skilfully combined the elements of the picturesque and the repulsive in the old time Spanish bull-fight, the costumes portrayed in brilliant tones and the figures brought into strong relief without elaboration of detail and with strength and simplicity of treatment. The two marine sketches by this artist are in his happiest style. The "Dogs and Hare" is an excellent study by Gustav Courbet, as yet but little known in America, as also is Dagnan-Bouveret, from whom are "Brittany Peasant Girl" and "La Bernoise." Fromentin's "Falconer" and "Women of Sahara" are here, and among Troyon's canvases are two of his choicest animal paintings. Degas' "Race-horses" and "The Dancing Lesson" are of little value except as specimens of the impressionist school from a man who seldom completes a picture, and yet is hailed by his brethren as one of the most talented and original artists of the day. The latter represents a number of ballet girls with circling arms pirouetting on satin-covered toes, among them a portly bald-headed ballet master, and seated in the foreground, reading a newspaper, a coarse looking woman attired in blue-spotted cotton gown. There is no attempt at theatrical display; simply a group of bare-legged lasses practising on a bare floor the art which brings them a livelihood.

Sisley's "Village Street, Moret" is a neatly executed composition, with pleasing color scheme, especially in its pink roofs contrasting against violet-tinted clouds. A picture by Helleu shows a beautiful light effect in the interior of St Denis cathedral, with a recess full of dim purple shadows, in the depths of which a stained



READING FROM HOMER. ALMA-TADEMA

glass window sheds on wall and effigied tomb tints of variegated hue. Worthy of note also are Gericault's "Study of a Cuirassier," Greuze's "Pouting Child," Bastien-Lepage's "Reverie" and "The Thames," Detaille's "Flag of Truce," Ribot's "Young Politician," Michel's "Plain of Montmartre" and "The Horseman," Decamps' "Oriental Kiosk," and Fantin-Latour's "Vision of Tannhäuser."

England is represented in the loan collection by Watts' portrait of Joachim, the greatest of modern violinists; Alma Tadema's "A Reading from Homer;" three of Constable's studies; a landscape by Barrington; Morland's "Contentment," and three of Swan's famous animal paintings. From Germany are canvases by Ludwig Knaus and Fritz von Uhde. From Holland the most noticeable works are "The Flock," by Antonin Mauve, and "A Frugal Meal," by Josef Israëls, whose "Alone in the World" is one of the most graphic studies in the Dutch section and in the entire art display. Jacob Maris in his "Canal in Holland" has expressed about all that can be got out of this favorite theme among Dutch artists; but such paintings are not all like this; only by the brush of a Maris and other masters of his school could so much expression be thrown into a commonplace subject. From Belgium there are "The Book Stall," by Hendrick Leys, and "You are Welcome," by Jan Van Beers; while from Sweden comes a single painting by Anders L. Zorn, showing the interior of a Stockholm brewery.

In Italian art there is Michetti's "Springtime and Love," the spring and love, that is, of Italy's sunny clime. The scene is by the sea-shore, with grass-covered cliff, verdure reaching almost to the water's edge, the figures, though a little singular in delineation, standing forth in perfect harmony with nature's kindly mood. "Beach at Portici," by the Spanish artist Fortuny, is a masterly rendition of sky and sea, with fleecy sunlit clouds flitting across a light blue atmosphere, and on a foreground of glistening sand, figures in gay attire blending with the brilliant hues of flowers and foliage. Finally, there are a few pieces of statuary by the Parisian sculptors, Jean Léon Gérôme and Auguste Rodin, the former represented by his tinted marble group of "Pygmalion and Galatea" and the latter by his "Andromeda" and two marble groups of "Francesca and Paolo,"—"L'Amour" and "La Rupture,"—all executed under commission for the Museum of decorative arts.

Among foreign participants the largest space was allotted to the French exhibits, which, except for one of the American loan contributions, occupy the entire eastern annex. While, as I have said, the works of some of the great masters are not here represented, the display is a far representation of the productions of the various schools, though from it more than a thousand eligible works were excluded merely through want of space. To the lighting of the chambers and the grouping of the pictures and statuary, under the direction of Roger-Ballu and his chief assistant, the former one of the art commissioners and inspector-general of fine arts, no exception can be taken. To give to the entire exhibition and to each of the exhibiting schools an appropriate expression, no pains were spared to insure the artistic grouping of the collections, the galleries being closely veiled until the last painting was in the appointed place.

A feature in this section is the cosmopolitan character of the display; for here are presented not only the works of all the French schools, but many in which there are unmistakable traces of foreign methods of



GENERAL VIEW IN FRENCH SECTION

treatment. Almost side by side with the finest landscape paintings of old-school masters are the broadest expressions of modern sensationalism and impressionism. Studies from the nude are plentiful, and as in all French exhibitions, among the best of the works. In most of them, however, there is no suggestion of indecency; for as Thackeray remarks, the draped figure is often more chaste than that which is depicted as nature made it. Portraiture is well represented, and with many new names on the list of contributors in this as in other departments; for apart from loan collections, the French exhibits, whether of oil paintings, water colors, or drawings, of pastels, engravings, etchings, or architectural compositions, are restricted almost entirely to modern schools.

By Frenchmen and by those who for many years have attended the salons of France, it is conceded that never before, not only in the United States but in the salons themselves, was so varied a representation of French contemporary art. But while one of the most exhaustive collections, it is by no means the best that France could have furnished, and for reasons already stated, falls somewhat short of expectation. Especially is noticed in many of the paintings a certain monotony of coloring, in light and florid tints, without warmth or richness of hue. Though at first the effect is not displeasing, it is impaired by sameness and repetition, just as in the Russian section we turn with a sense of disappointment from the exaggerated and sometimes gaudy strains that mar the style of its depictions. Then there is observed an effeminacy of treatment, a lack of



ARCHITECTURE AND HISTORIC SCULPTURE EAST COURT

originality in motif and of vigor in execution, giving to some of the compositions the stamp of hopeless mediocrity.

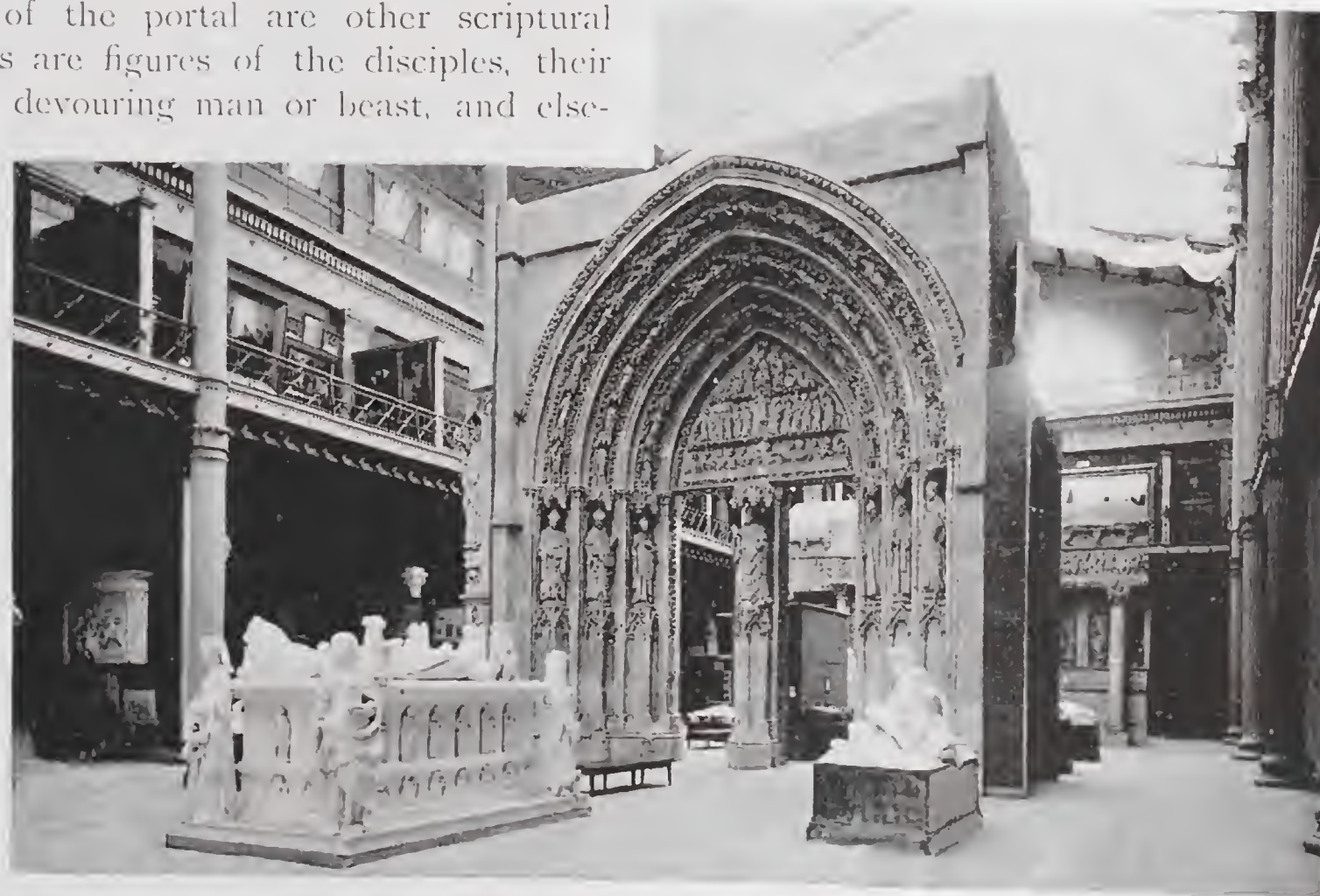
But to the majority of French paintings these remarks do not apply, while in sculpture none of the groups will compare with those which France has contributed. Though, as I have said, her display of statuary has been surpassed at former expositions, several of the great masters find expression, and among nearly 150 works, their subjects

ranging from cock-fighting to classic and historic symbolism, there are many of unquestionable merit. In addition to these is a collection of architectural and other casts from the museums of Comparative Sculpture, of Decorative Arts, and of the Louvre, better known as the Trocadero collection, from the name of the palace in which most of the originals are contained. This is of special interest

as the most valuable pieces have been presented to the Exposition authorities, and will form the nucleus of an art collection. Here may be traced through several centuries the development of French architecture, and especially of church and cathedral architecture, including the Romanesque, the Gothic, the renaissance, and the designs of more modern schools.

First among the groups is the sculptured portal of the church of Notre Dame du Port at Clermont-Ferrand, an eleventh century composition, the angular rigidity of the figures of Isaiah and John the Baptist on either side of the entrance revealing traces of Byzantine influence. Of the monastery of Charlieu is reproduced a portion of its façade, with diminutive windows, and large double door-way, the lintel surmounted with decapitated images of Christ and his apostles, the mutilation noticeable in these and other figures being probably the work of iconoclasts during the revolutionary era. On the tympanum is a seated form of Christ, with hand uplifted in blessing, and above it a richly ornamented arch. A façade of the church of Saint Gilles is also in part reproduced, its frieze representing in relief scenes from the passion; on the lintel and in the embrasures of the portal are other scriptural scenes. In each of the embrasures are figures of the disciples, their feet resting on lions in the act of devouring man or beast, and elsewhere in the decorative scheme are hunting scenes. The profane, it may here be observed, enters largely into the ecclesiastical architecture of the middle ages, with beasts portrayed in arabesque, saints and angels intermingling with heroes and demigods, while from Pompeian ruins have been unearthed the winged seraphim characteristic of Christian monuments.

In the casts above described are represented eleventh and twelfth century architecture. To the thirteenth century belongs the cathedral of Notre Dame de Paris, from which are portions of its



CHURCH ARCHITECTURE OF FRANCE

western door-way, with figures of prophets and kings on either side of the virgin, whose entombment and coronation are also symbolized, angels holding the winding sheet and in the back ground Christ and his apostles. From the cathedral of Bordeaux there is a large reproduction of the portal of its northern transept, where is a figure of Bertrand, archbishop of the diocese, afterward Pope Clement V. The arch is adorned with delicately executed forms of angels, apostles, prophets, and patriarchs, and in bas-reliefs superimposed are portrayed on the tympanum the last supper, the ascension, and Christ triumphant. By an unknown artist is a delicate piece



PORTION OF FRENCH SECTION

of workmanship whose theme is a stone gallery in the cathedral of Limoges. In the decorative scheme are winged heads of angels, headless figures emblematic of the cardinal and other virtues, with monstrous beasts and images sacred and profane, all in the choicest symbolism of the renaissance period. Elsewhere are represented the cathedrals of Amiens, Laon, Reims, Rouen, Lyons, Sens, Aix, Chartres, Bourges, Nantes, and Beauvais, with chapel, cloister, and chateau architecture from the eleventh to the nineteenth century.

Tombs are a feature in this collection, representing among other sepulchres that of the children of Charles VIII, fashioned in 1506, the figures of the princes lying on the top, with angels at either end, and in relief the exploits of Hercules and Samson. Here also is shown the sarcophagus of Francis II and his wife Marguerite de Foix, contained in the cathedral of Nantes, and executed, it is said, in 1507. But a more remarkable work than either is from the tomb of the seneschal, Louis de Brézé, the husband of Diana of Poitiers, erected in 1540 in the cathedral of Rouen. In the original the body rests on a slab of black marble; at its head is the form of his wife and at its feet the virgin and child, all the figures being flanked by pairs of Corinthian columns supporting an ornamented entablature, above which is an equestrian statue of the seneschal in full armor, the entire composition forming a choice illustration of renaissance art.

In contrast with these sombre themes are figures of the graces by Germain Pilon, resting back to back and with joined hands on a triangular base. A cast of a nude statue of Diana by Houdain, with remarkable symmetry of outline, represents the goddess poised on her left foot, and with orthodox bow and arrows. "Voltaire" by the same artist, the bronze original of which is in the foyer of the Comedie-Française, is a composition full of power and character. There are also casts of fourteenth and fifteenth century statues of Guillaume de Chanac and Philippe de Morvillier, with one of King Philippe VI, all from the Louvre at Paris. Animal sculpture finds a place in the collection, especially in the works of Barye, and there are nymphs and nereids, tritons and other fabulous creatures, for the most part of somewhat inferior execution.

Passing to contemporary art, may first be mentioned the statuettes of Meissonier, several of whose less known works are reproduced in bronze or casts in *cire perdue*. Among them is the figure of Marshal Duroc from Castiglione's painting of the "Campaign of Italy, 1796." On this he was at work when overtaken by the illness which ended his career. A spirited group by the same artist is the "Héraut de Murice," a trumpeter of the time of Louis XIII, the attitude of his steed showing the tension of extreme excitement. Others are his "Wounded Horse, Siege of Paris," "Dancing Muse," and "Design for a Fire-place," the last intended for his own atelier, its shelf supported by renaissance figures. In the "Four Figures from the Tomb of Lamorcière" to which Paul Dubois gave several years of earnest work, is a rare combination of the natural and the ideal. Faith is personified in the form of a young woman of virginal purity; charity in a woman with infants in her arms; meditation in a man with bowed head, with downcast features of strong, intellectual mold, and military courage in a youth clad in complete armor, over whose shoulders is a lion's skin.

A reproduction of "David the Victor," by Antonin Mercié, a pupil of Dubois, though dissimilar in pose, is suggestive of Donatello's famous statue; but here we have rather a promise than an expression of his more finished style, for this was one of his earliest works. In better vein is his "Quand Même," the original of which was executed for a monument at Belfort. Its theme is Alsace, symbolized by a young woman grasping the rifle of a wounded French soldier, who clutches the hem of her garment as he falls. "The First Funeral,"

by Barrias, is one of the masterpieces of French sculpture, even its mutilated condition detracting but little from the force and dignity of this well conceived and powerful composition. Adam is carrying to its resting place the lifeless body of his son; Eve stooping to kiss the brow, and in both a subdued but tense expression of grief, too strong for words or tears. "Mozart as a Child," in the act of tuning his violin, is a beautiful figure, its costume, pose, and suggested motion full of life and truth. Chapu's "Jeanne d'Arc" in kneeling attitude is in the best style of this well-known artist, whose themes are mainly from the antique. Falguière's "Republican France" is a symbolic statue, ordered for the occasion by the French government. In his figures of Diana is a better illustration of his skill and delicacy of technique. Of the colossal group in bronze, whose theme is Washington and Lafayette, it need only be said that it is one of Bartholdi's works. A modest and unpretentious work by Raoul Larche is "Jesus Before the Rabbis," representing its subject looking upward at the doctors as though questioned or bethinking him how to answer a question. His attire is of the plainest, consisting only of a single garment, and in the features and figure there is no suggestion of the divine, except for the divinity which belongs to childhood.

A strong and impressive work is Saint-Marceaux' "Spirit Guarding the Secret of the Tomb," for which was awarded the medal of honor at the Paris salon in 1879. In the features and figure of the genius, his face turned backward as though resenting intrusion, while grasping in his arms a funeral urn, is a wonderful depth of expression. Rodin's "Burgess of Calais" recalls the familiar story of the siege of that city in the days of Edward III, with the figure of one of its heroic defenders, on which is the impress of stern resolution, portrayed in almost Gothic simplicity of outline. Boucher's "On the Ground" is one of the best examples of the naked figure used as a medium of expression. Toil is the theme which is symbolized in the person of a man digging around a stone with his shovel, and had the form been draped, the effect would be merely that of a common laborer at his daily task. Of nude woman, Idrac's "Salammbô" is a well executed type, though expressive of nothing in particular. In Marquestre's "La Cigale" is portrayed with startling realism the sensation of cold. By Delaplanche "Security" is symbolized in true academic vein by the figure of a woman clad in armor, with sword in hand, and in her lap a sleeping infant. In Lanson's "The Age of Iron" is expressed by a warrior and his vanquished foe the spirit of the age when might was right. "The Blind Man and the Paralytic" is the subject chosen by Jean Turcan and Gustave Michel, the latter of whom has two other statues on exposition.



AMONG THE STATUARY OF FRANCE

In animal sculpture Emanuel Frémiet stands almost alone in his profession, though his choicest works, as the equestrian statue of Jeanne d'Arc in the Place des Pyramides at Paris, are not reproduced in the French collection. His wounded dog, while a faithful delineation, is one of his minor works. In his "Man of the Stone Age" is symbolized the prehistoric era of the human race, the figure, clad in the skins of wild beasts and grasping a huge hammer with head of stone, standing forth with tense rigidity of outline, and yet in the features is a certain aspect of intelligence and even of dignity. The life-sized groups by Auguste Cain are accurate representations, but lacking in vigor of expression, and would be more in place in a zoölogical museum than in a gallery of fine arts. One of them represents a rhinoceros goring a tiger, while a second tiger springs at his shoulder. The others are entitled "Eagle and Vulture Quarrelling over a Dead Bear" and "Lion Strangling a Crocodile," the latter a feeble composition as compared with a similar theme by Barye in the Trocadero collection.

Turning to the picture galleries, with nearly 500 oil paintings and a large number of water colors, drawings, etchings, and engravings, we find here almost every conceivable subject that has occupied the brush of the painter. While a large proportion are in lighter vein, with something too much of the frivolous and altogether too much of the nude, graver themes are well represented. Of portraits, landscapes, mythologic, military, and historic scenes there is a large collection, some by acknowledged masters and others of unquestionable merit,

while even religious subjects are treated with all the pathos and seriousness of which the Frenchman's mercurial temperament is capable.

In portraiture and figure painting may first be mentioned the three works of Carolus Duran, one of which excited much comment at the salon of the Champs de Mars in 1892. It represents in truthful rather than complimentary vein a wealthy middle-aged American woman, seated in state against a background of yellow plush curtains, attired in satin and velvet and bedecked with jewels, her feet resting on a



FRENCH AND BRITISH SECTIONS, SOUTH COURT

silken cushion, and her face and hair suggestive of powder and rouge. Another portrait is that of a young girl; and a third shows a pleasing figure in gray, both in the happiest style of this master of his special art. Bonnat's "Cardinal Lavignerie" has more of the Turkish than the episcopal aspect, the red sash and black soutaine beneath his scarlet robe giving to this African primate almost the appearance of a pasha, which is further enhanced by his fez and his swarthy complexion. "Renan," by the same artist, shows a heavy thick-set figure and sensuous face peering forth from their enveloping shadow. Chartran's portrait of Leo XIII is an excellent work; but not, as has been claimed, the only one taken from life.

Raffaelli's three canvases do not fairly express the power of this eminent master, who appears to much better advantage in the loan collection. "The Grandfather" is over bulky in form, as also is the child by his side. "In the Plain" does little credit to his brush, and his depiction of Brittany peasants is somewhat hard in tone. Of Henner's "Portrait of My Brother," "Lola," and "Slumber," the two last are female heads reproduced in his dreamy, languorous style. Rondel's "James Gordon Bennett" is one of the gems of the collection, as also is Gustave Courtois' "Madame Gauthereau," both of them life-like and strong conceptions. One of Wencker's paintings is said to produce the refined and sensitive features of Madame Giroa, another is of Boulanger; but a work more admired than either is his large painting of the Basilica, with its rich Byzantine theme. "Portrait of M. G. A. E." is the only canvas from Eugène Antoine Guillon, one of the most celebrated painters of historic portraits, among which are "Napoleon's Adieu to France," "Napoleon at St Helena," and "John Brown and His Accomplices on Trial." Alfred Guillon, though a sculptor by profession, is also represented by a single picture, the subject of which is "My Little Brother." Another master of historic portraiture is Jean Paul Laurens, who has long stood at the head of his profession, and has exhausted all the honors which his country had to offer. His themes are "Christopher Columbus" and "The Seven Troubadours." Layraud's portrait of Liszt represents the great composer standing by the side of his instrument. "Young Girl

of Toumourth, Algiers" is by Charles Landelle, a most prolific painter, not only on canvas but on everything else upon which paint can be laid.

A pleasing composition is the "Rêverie" by Jules Emile Saintin, a medallist of 1866 and with remarkable facility of adaptation, his themes extending from the soubrettes of the Comédie Française to the dignitaries of the church. The "Portrait of Professor Charcot" is by Saintin the younger, who appears to better advantage in marine and landscape scenes. Henri Gervé's three canvases are in the familiar style of this well known portrait and genre painter, among whose more famous works are "Diana and Endymion" and "Communion at the Church of the Trinity." In the compositions of Jean François Gigoux there is much to remind us of this veteran artist whose "Jean d'Arc," "Charlotte Corday," and "Death of Cleopatra" are among the masterpieces of the age. So also with Jean Joseph Weerts and Louis Picard, the former represented in the salons since 1867 and the latter for nearly half a century. "The Old Peasant" and "Dreaming," are by Edouard Sain, from whose facile brush are many truthful scenes of every-day life. "The Death of Archimedes" is from Edouard Vimont, whose figure paintings range from pagan myth to Christian martyrdom.

One of the strongest subjects, though something more than a portrait, is "Marat, Friend of the People," representing this incarnation of the reign of terror seated at a table while writing his despatches, his coarse animal features and fell shock of unkempt hair giving to him almost the appearance of a beast of prey, so that we could wish his career had sooner been ended by the knife of Charlotte Corday. The work is by Daniel Léon Saubes. Adolphe Yvon's "Carnot" is a full length portrait of the president of the French republic in

cabinet session. "Japan" is a decorative fantasy by Louise Albema, showing a woman in Japanese attire amid a group of porcelains and embroideries, around which is a border of chrysanthemums. While a pleasing subject, it is somewhat commonplace as compared with other works of this famous artist. "The Falling of the Leaves" represents, amid an autumn landscape, the figure of a pretty woman such as none know better how to paint than Madeleine Lemaire. A fine conception also is her "Chariot of the Fairies," hung in the southern gallery. "The King of the Forest" and "The Overthrow" from the brush of Rosa Bonheur, and "Diana" by Helen D'Etiolles Leroy are among the best of women's works, the latter a beautiful composition, though with features suggestive rather of a court beauty than of the stately Artemis. Of the three canvases from Virginie Demont Breton, one has for its subject the training of a young sailor taking his first surf bath as he clings to the arms of his mother. "Young Girl," by Fanny Fleury, has all the delicacy of treatment characteristic of this painter, the only one of a family of artists represented in the French galleries.

"Repose" and "The Friend of the Lowly," by L'Hermitte, are in the best vein of this well known artist, whose style is suggestive of Jean François Millet, represented, as are other great masters, only in the loan collection in the United States galleries. In the latter the form of a little child appearing



THE KING OF THE FOREST. BONHEUR

